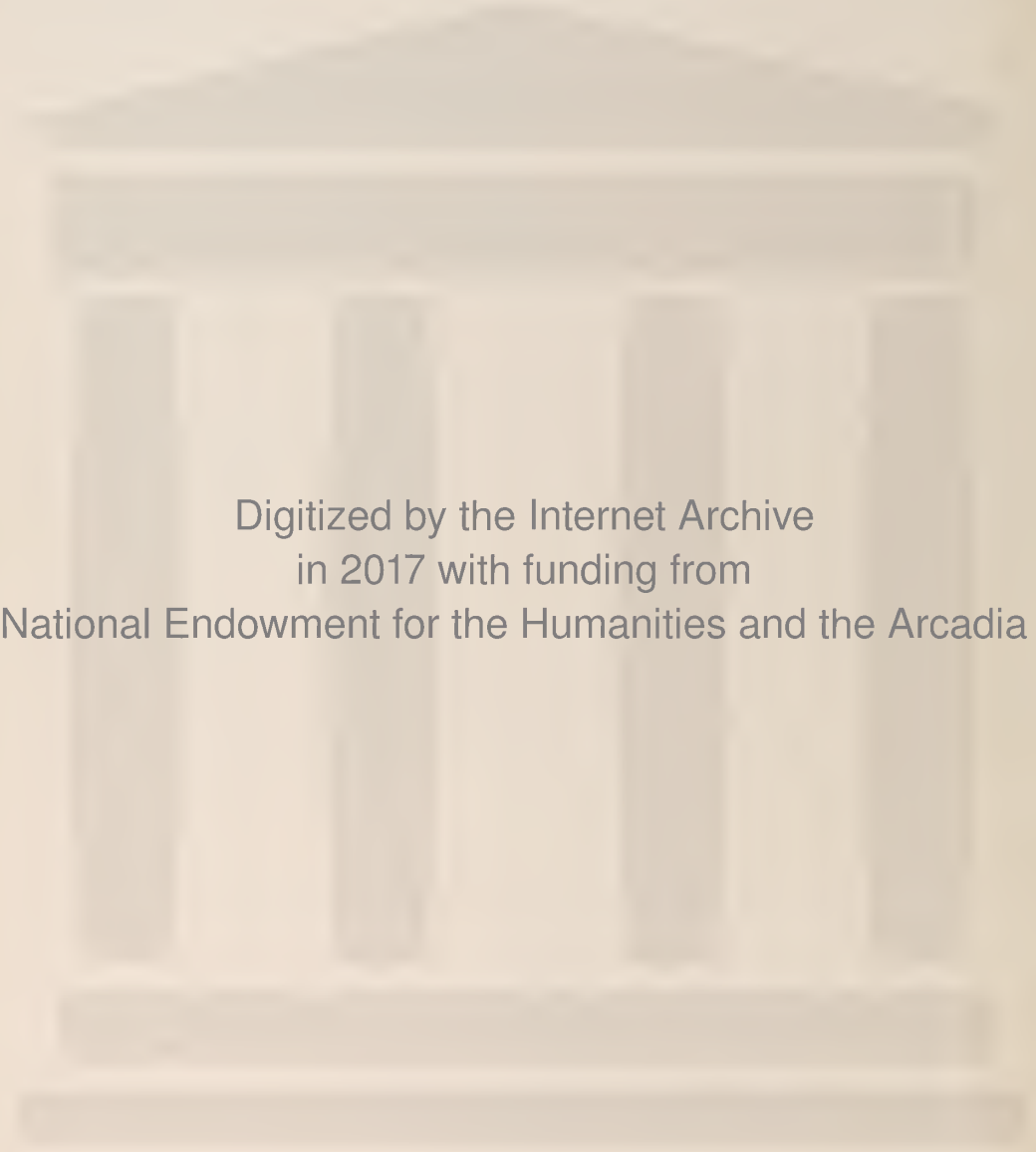
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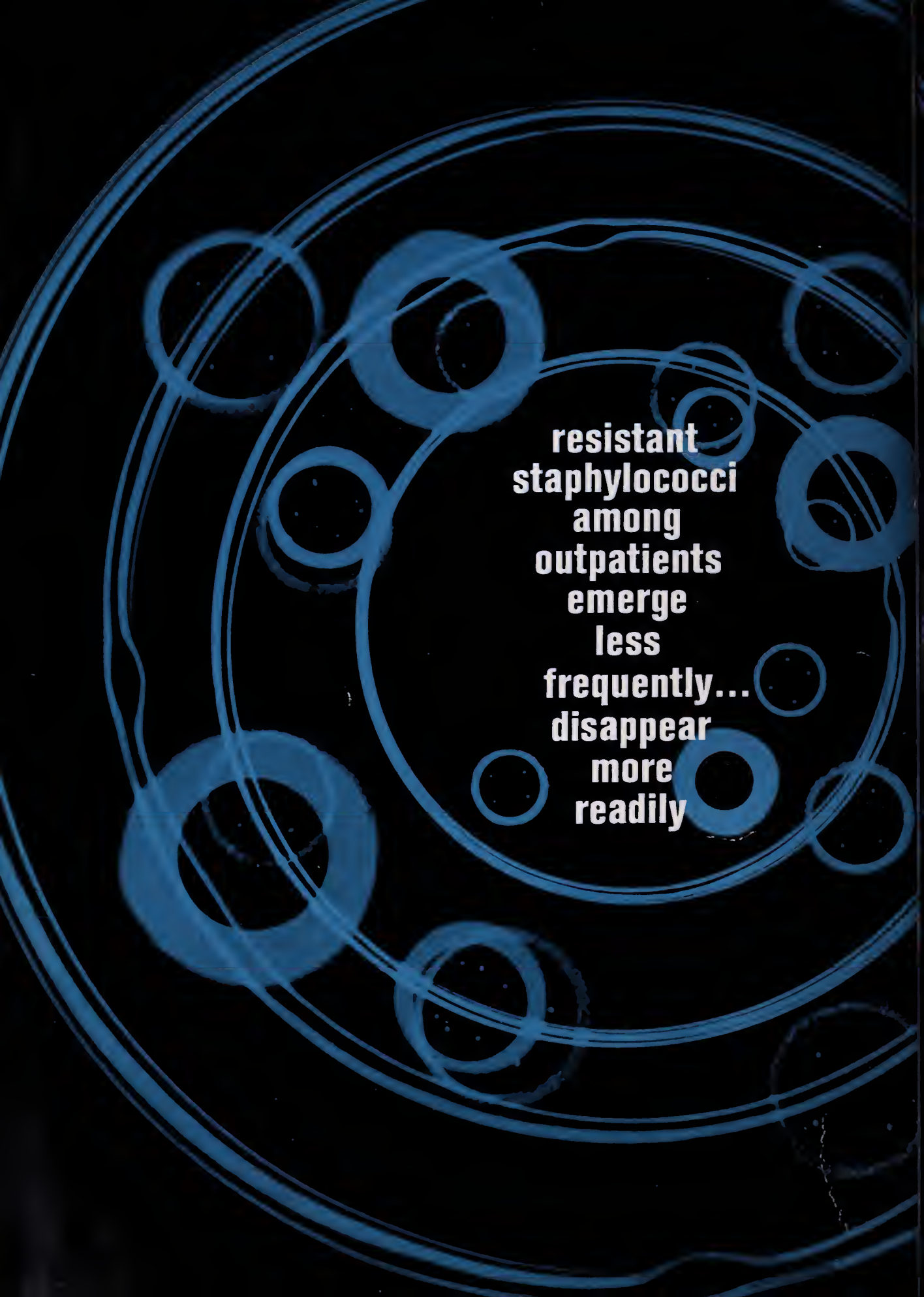
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References: (1) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (2) Goslings, W. R. O., & Büchli, K.: *Arch. Int. Med.* 102:691, 1958. (3) Goodier, T. E. W., & Parry, W. R.: *Lancet* 1:356, 1959. (4) Fisher, M. W.: *Arch. Int. Med.* 105:413, 1960. (5) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* 105:398, 1960. (6) Glas, W. W., in Symposium on Antibacterial Therapy, Michigan & Wayne County Acad. Gen. Pract., Detroit, September 12, 1959, p. 7. (7) Modarress, Y.; Ryan, R. J., & Francis, Sr. C. E: *J. M. Soc. New Jersey* 57:168, 1960. (8) Rebhan, A. W., & Edwards, H. E.: *Canad. M. A. J.* 82:513, 1960.

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These sensitivity tests were done by the disc method on 310 strains of coagulase-positive staphylococci. Strains were isolated from patients seen in the emergency room. It should be noted that among inpatients, resistant strains were considerably more prevalent.

*Adapted from Bauer, Perry, & Kirby[1]

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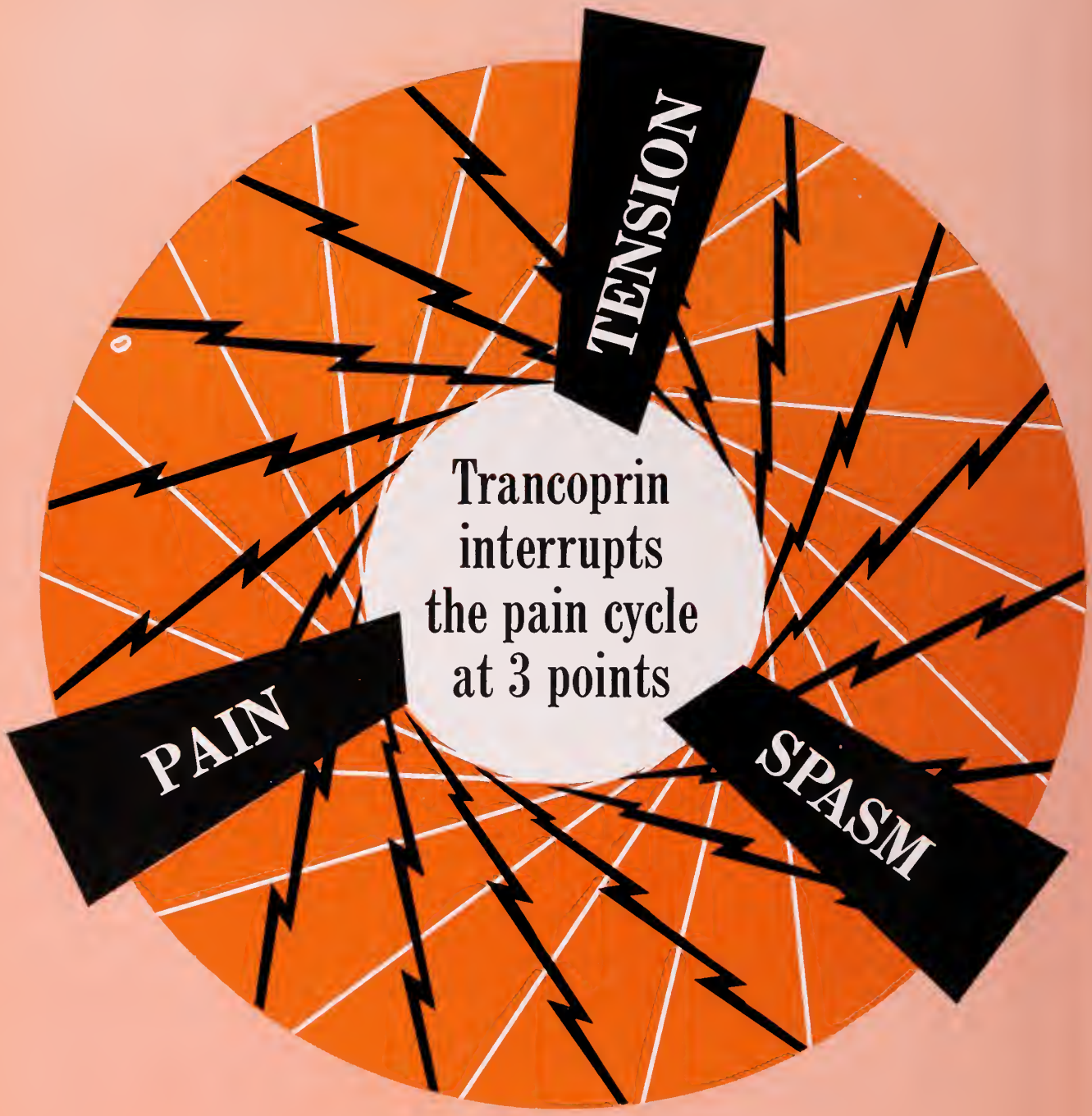
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announcing...

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acetylsalicylic acid (300 mg.) and chlormezanone (50 mg.)

Tablets



a broad spectrum non-narcotic analgesic

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References: 1. DeNyse, D. L.: *M. Times* 87:1512, Nov., 1959. 2. Ganz, S. E.: *J. Indiana M. A.* 52:1134, July, 1959. 3. Gruenberg, Friedrich: *Current Therap. Res.* 2:1, Jan., 1960. 4. Kearney, R. D.: *Current Therap. Res.* 2:127, April, 1960. 5. Lichtman, A. L.: *Kentucky Acad. Gen. Pract. J.* 4:28, Oct., 1958. 6. Mullin, W. G., and Epifano, Leonard: *Am. Pract. & Digest Treat.* 10:1743, Oct., 1959. 7. Shanapby, J. F.: *Current Therap. Res.* 1:59, Oct., 1959. 8. Collective Study, Department of Medical Research, Winthrop Laboratories. 9. Hergesheimer, L. H.: An evaluation of a muscle relaxant (Trancopal) alone and with aspirin (Trancoprin) in an industrial medical practice, to be submitted.

Winthrop LABORATORIES, New York 18, N. Y.

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THE MAIL BOX

To the Editor:

I think the proposal of having a *Letters to the Editor* department is an excellent one. I think it will stimulate interest in the Journal in much the same way that this does in lay publications — sometimes I feel the *Letters to the Editor* in the local newspaper gets read as much as the comic strips. As regards the other two features proposed, they will, of course, depend upon the co-operation of the members, and I hope that it will be forthcoming.

I am sure that under your guidance the Journal is due for a lively future.

Sincerely yours,

Irving A. Beck, M.D.

Thanks to the Medical Bureau

164 Sharon Street,
Providence, R. I.
November 4, 1960

Dr. John C. Ham
Providence Medical Bureau
Providence, Rhode Island

Dear Doctor Ham:

On Sunday evening, October fourteenth, my mother was stricken ill. Our family physician was out of the city, so the call was serviced by the Medical Bureau. The telephone operator on duty calmly and efficiently arranged to send a substitute doctor and the Rescue Squad from the Fire Department. Within ten minutes my mother was receiving emergency treatment. Later she was removed to the hospital.

My family and I are most grateful to the Medical Bureau for this remarkable service, and deeply indebted to the operator who was on duty.

Sincerely yours,

Grace D. Healey

Journal Book Review Wins Praise

Department of the Army
The Historical Unit,
U. S. Army Medical Service,
Walter Reed Army Medical Center,
Washington 12, D. C.
28 November 1960

Thomas C. McOsker, M.D.
144 Waterman Street
Providence 6, Rhode Island

Dear Doctor McOsker:

Your review in the October 1960 Rhode Island Medical Journal of the second neurosurgical volume in the series dealing with the history of the U. S. Army Medical Department in World War II has given me a great deal of pleasure. I was particularly pleased over your comment on how stimulating differences of opinion among authors may be. I was also amused, for some of the production editors who first worked on this volume and who were innocent of all knowledge of medicine thought this was pretty awful and demanded that such differences be reconciled.

I shall call your review to the attention of Doctors Spurling and Woodhall, the editors of the neurosurgical series, and to the various authors. I know they will all be pleased with your remarks as I am.

The World War I Medical Department history, as you probably know, was not properly publicized, and many mistakes were made in World War II that would not have happened if the vast amount of information it contains had been widely known. That isn't going to happen with the World War II history, I am happy to say, thanks to such stimulating reviews as yours, and to the co-operation of the journal editors who distribute our books for review.

Sincerely yours,

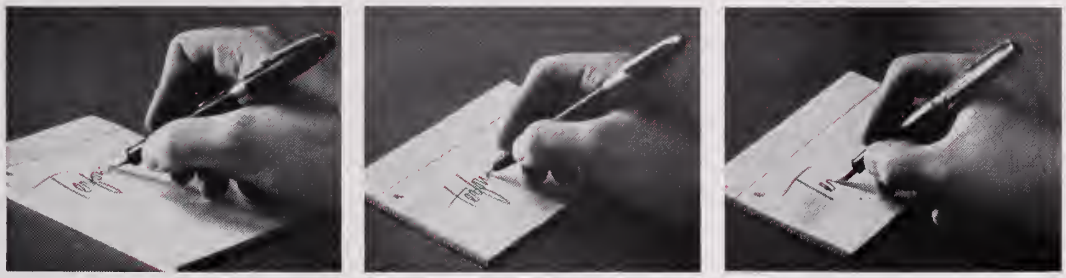
John Boyd Coates, Jr.
Colonel, Medical Corps
Editor-in-Chief

DID YOU KNOW?

- That the average American consults a doctor about his health five times a year.
- That in an average year, Americans have 115 million colds severe enough to restrict activity or require medical attention.
- That there are some 1,200 insuring organizations currently providing health insurance to the public.
- That the residents of every state in the nation except Alaska can choose from among more than 100 insuring organizations in selecting their health insurance, and that Alaskans have a choice of 74 insuring organizations.
- That some 2.4 million Americans have ulcers, and that nearly three times as many men as women are so affected.



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Ammonium Chloride	60 mg.
Sodium Citrate	85 mg.

Average adult dose: One teaspoonful after meals and at bedtime. May be habit-forming. Federal law permits oral prescription.

Literature on request

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BOOK REVIEWS

YOUR CHILD'S CARE. 1001 QUESTIONS AND ANSWERS. A Mother's Guide to Healthy and Happy Babies by Harry R. Litchfield, M.D., F.A.C.P. and Leon H. Dembo, M.D. Doubleday & Company, Inc., Garden City, N.Y., 1960. $3.95

This book is helpful to those who would like to follow the progress of their child growing up. Information is basic and functionally adequate to relieve most parents' anxieties. In addition to the common childhood problems, special attention has been given to such topics as the Rh factor, congenital and acquired heart disease, immunizations, congenital deafness, muscular dystrophy, nephrosis, allergies, cystic fibrosis, cerebral palsy, cancer and diabetes in childhood. The chapter on poison is good.

On page 32, a multiple four-way vaccine, combining whooping cough, diphtheria, tetanus and polio, is mentioned. As presently available, this four-way vaccine lacks satisfactory potency as regards its pertussis component. It is recommended that all children who have received this four-in-one vaccine be re-immunized promptly against pertussis. On page 35, oral polio vaccine is said to be not licensed yet. It is now licensed and will soon be available. On page 107, the incubation period for scarlet fever is stated to be 2-4 days. It may be a few hours to as much as 6-7 days and carditis can be added to the list of scarlet fever complications already noted in the book.

This manual is recommended for parents. It should help to cut down on unnecessary telephone calls to doctors but not serve as a substitute.

PETER L. MATHIEU, JR., M.D.

THE LIST METHOD OF PSYCHOTHERAPY by Elizabeth Sher, Eleanor Messing, Theodora Hirschhorn, Enis Post, Annette Davis, and Arthur Messing with an introduction by Jacob S. List. Philosophical Library, New York, 1960. $7.50

This 257-page book consists of about thirty to fifty pages by each author. Sher discusses *Therapist Selection and Training;* Eleanor Messing, *Higher Education as Therapy;* Hirschhorn, *The Reception Room as Therapeutic Community;* Post, *Family Resistance and Client Progress;* Davis, *Warmth in the Therapeutic Process;* and Arthur Messing, *Sexual Inversion and Re-orientation. The Reception Room as Therapeutic Community* and *Higher Education as Therapy* are stimulating chapters. The reception room is used to promote friendliness and social contacts; and higher education to get patients to take their minds off their problems, to allay anxiety, and to promote different goals.

Success in higher education tends to increase self-respect, social relations, ability in self-expression, and appreciation of self-value. It makes anxiety less important and decreases self-preoccupation. Concentration is on talents and ability rather than on failings and inferiority feelings. The patient is turned from thought to action. This probably accounts for much of the success of the treatment. Education is aimed at intellectual maturity. The accompanying psychotherapy is aimed at emotional maturity which is so necessary to secure the acceptance of the discipline of education.

WILLIAM NEWTON HUGHES, M.D.

THE MODERN FAMILY HEALTH GUIDE. Edited by Morris Fishbein, M.D. Doubleday & Company, Inc., Garden City, New York, 1959. $7.50

This volume contains one thousand and one pages. The first four hundred are divided into ten parts, descriptive writing about various phases of medicine, by a large staff of contributing specialists. Included are some general remarks about health and modern medicine by the editor; problems of infancy, childhood and adolescence; diseases of most of the major systems; sections on "the later years," medical statistics and first aid. The last six hundred and one pages contain an *Encyclopedia of Family Health* and an index. The encyclopedia contains definitions of diseases, drugs, anatomical parts and assorted medical terms. Often there is quite a long discussion, as in the liver entry, which merits two full pages. This includes anatomy, physiology, pathology, clinical entities and treatment, all in a nutshell.

The last forty pages contain a very complete index of everything mentioned in the book, which covers a lot of territory. The index is thorough,

continued on page 14

ANNOUNCING—
SPECIFICALLY FOR
INFECTIONS DUE TO
"RESISTANT" STAPHYLOCOCCI

AN ENTIRELY NEW SYNTHETIC
"STAPH-CIDAL" PENICILLIN

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

UNIQUE—BECAUSE IT
RETAINS ANTIBACTERIAL
ACTIVITY IN THE PRESENCE OF
STAPHYLOCOCCAL PENICILLINASES
WHICH INACTIVATE
OTHER PENICILLINS

Bristol™

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NEW SYNTHETIC PENICILLIN FOR "RESISTANT" STAPH

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Official Package Circular
November, 1960

STAPHCILLIN™

(sodium dimethoxyphenyl penicillin)

For Injection

DESCRIPTION

Staphcillin is a unique new synthetic parenteral penicillin produced by Bristol Laboratories for the specific treatment of staphylococcal infections due to resistant organisms. Its uniqueness resides in its property of resisting inactivation by staphylococcal penicillinase. It is active against strains of staphylococci which are resistant to other penicillins.

Each dry filled vial contains: 1 Gm. Staphcillin (sodium dimethoxyphenyl penicillin), equivalent to 900 mg. dimethoxyphenyl penicillin activity.

INDICATIONS

Staphcillin is recommended as specific therapy only in infections due to strains of staphylococci resistant to other penicillins, e.g.:

Skin and soft tissue infections: cellulitis, wound infections, carbuncles, pyoderma, furunculosis, lymphangitis and lymphadenitis.

Respiratory infections: staphylococcal lobar or bronchopneumonia, and lung abscesses combined with indicated surgical treatment.

Other infections: staphylococcal septicemia, bacteremia, acute or subacute endocarditis, acute osteomyelitis and enterocolitis.

Infections due to penicillin-sensitive staphylococci, streptococci, pneumococci and gonococci should be treated with Syncillin® or parenteral penicillin G rather than Staphcillin. Treponemal infections should be treated with parenteral penicillin G.

DOSAGE AND ADMINISTRATION

Staphcillin is well tolerated when given by deep intragluteal or intravenous injection.

As is the case with other antibiotics, the duration of therapy should be determined by the clinical and bacteriological response of the patient. Therapy should be continued for at least 48 hours after the patient has become afebrile, asymptomatic and cultures are negative. The usual duration has been 5-7 days.

Intramuscular route: The usual adult dose is 1 Gm. every 4 or 6 hours. Infants' and children's dosage is 25 mg. per Kg. (approximately 12 mg. per pound) every 6 hours.

Intravenous route: 1 Gm. every 6 hours using 50 ml. of sterile saline solution at the rate of 10 ml. per minute.

**Warning:* Solutions of Staphcillin and kanamycin should not be mixed, as they rapidly inactivate each other. Data on the results of mixing Staphcillin with other antibiotics are being accumulated.

DIRECTIONS FOR RECONSTITUTION

Add 1.5 ml. sterile distilled water or normal saline to a 1 Gm. vial and shake vigorously. Withdraw the clear, reconstituted solution (2.0 ml.) into a syringe and inject. The reconstituted solution contains 500 mg. of Staphcillin per ml. Reconstituted solutions are stable for 24 hours under refrigeration.

For intravenous use, dilute the reconstituted dose in 50 ml. of sterile saline and inject at the rate of 10 ml. per minute.

*This statement supersedes that in the Official Package Circulars dated September and/or October, 1960.

(continued)

MICROBIOLOGICAL AND PHARMACOLOGICAL PROPERTIES

In vitro studies show that STAPHCILLIN is a bactericidal penicillin with activity against staphylococci resistant to penicillin G. Strains of staphylococci so far tested have been sensitive to STAPHCILLIN *in vitro* at concentrations of 1-6 mcg. per ml. These levels are readily attained in the blood and tissues by administration of STAPHCILLIN at the recommended dosage. This unique attribute is probably due to the fact that STAPHCILLIN is stable in the presence of staphylococcal penicillinase. STAPHCILLIN also resists degradation by *B. cereus* penicillinase. The antimicrobial spectrum of STAPHCILLIN with regard to other microorganisms is qualitatively similar to that of penicillin G; but considerably higher concentrations of STAPHCILLIN are required for bactericidal activity than is the case with penicillin G.

STAPHCILLIN is rapidly absorbed after intramuscular injection. Peak blood levels (6-10 mcg. ml. on the average after a 1.0 Gm. dose) are attained within 1 hour; and then progressively decline to less than 1 mcg. over a 1 to 6 hour period. It is poorly absorbed from the gastrointestinal tract. STAPHCILLIN is rapidly excreted by the kidney.

As shown by animal studies, STAPHCILLIN is readily distributed in body tissues after intramuscular injection. Of the tissues studied, highest concentrations are reached in the kidney, liver, heart and lung in that order; the spleen and muscles show lower concentrations of the antibiotic. STAPHCILLIN diffuses into human pleural and prostatic fluids, but its diffusion into the spinal fluid has not yet been completely studied. However, one patient with meningitis showed a significant concentration in his spinal fluid while on STAPHCILLIN therapy.

Toxicity studies with STAPHCILLIN and penicillin G in animals show that they have approximately the same low order of toxicity.

Certain staphylococci can be made resistant to STAPHCILLIN in the laboratory, but this resistance is not related to their penicillinase production. During the clinical trials, no STAPHCILLIN-resistant strains of staphylococci were observed or developed; the possibility of the emergence of such strains in the clinical setting awaits further observation.

PRECAUTIONS

During the clinical trials, several mild skin reactions, e.g., itching, papular eruption and erythema were observed both during and after discontinuance of STAPHCILLIN therapy. Patients with histories of hay fever, asthma, urticaria and previous sensitivity to penicillin are more likely to react adversely to the penicillins. It is important that the possibility of penicillin anaphylaxis be kept in mind. Epinephrine and the usual adjuvants (antihistamines, corticosteroids) should be available for emergency treatment. Because of the resistance of STAPHCILLIN to destruction by penicillinase, parenteral *B. cereus* penicillinase may not be effective for the treatment of allergic reactions. Information with regard to cross-allergenicity between penicillin G, penicillin V, phenethicillin (Syncillin) and STAPHCILLIN is not available at present. If superinfection due to Gram-negative organisms or fungi occurs during STAPHCILLIN therapy, appropriate measures should be taken.

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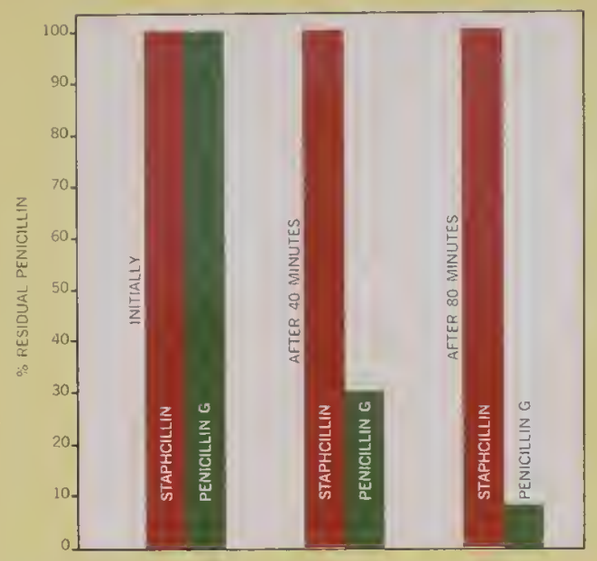
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In the presence of staphylococcal penicillinase, STAPHCILLIN remained active and retained its antibacterial action. By contrast, penicillin G was rapidly destroyed in the same period of time. *(After Gourevitch et al., to be published)*

Specifically for "resistant" staph...

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

The failure of staphylococcal infections to respond to penicillin therapy is attributed to the penicillin-destroying enzyme, penicillinase, produced by the invading staphylococcus.

Unlike other penicillins:

1 STAPHCILLIN is effective because it retains its antibacterial activity despite the presence of staphylococcal penicillinase.

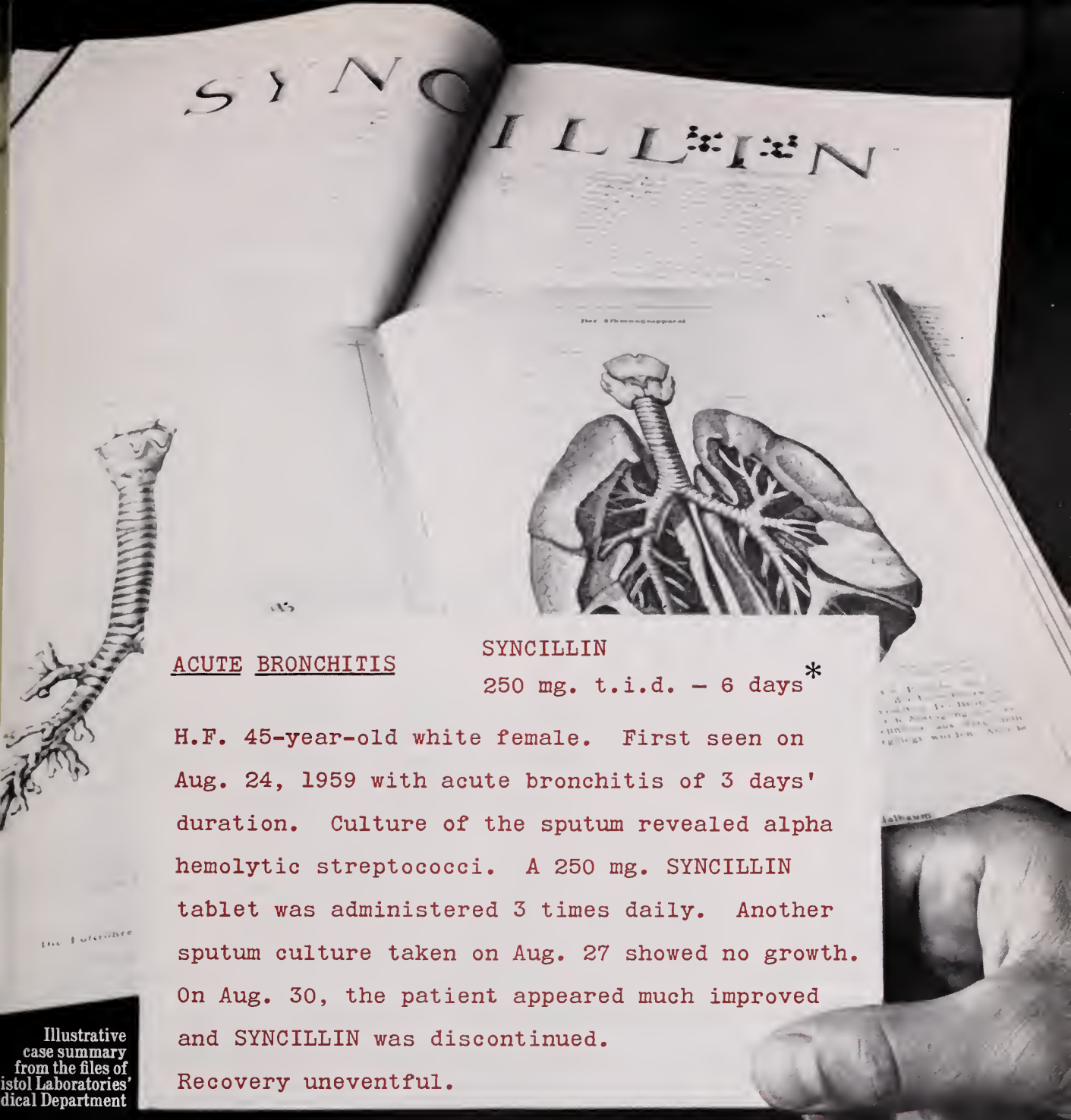
2 The clinical effectiveness of STAPHCILLIN has been confirmed by dramatic results in a wide variety of infections due to "resistant" staphylococci, many of which were serious and life-threatening.

Like other penicillins:

STAPHCILLIN has no significant systemic toxicity. It is well tolerated locally, and pain or irritation at the injection site is comparable to that following the injection of penicillin G. *In occasional cases, typical penicillin reactions may be experienced.*

PROFESSIONAL INFORMATION SERVICE — The attached Official Package Circular provides complete information on the indications, dosage, and precautions for the use of STAPHCILLIN. If you desire additional information concerning clinical experiences with STAPHCILLIN, the Medical Department of Bristol Laboratories is at your service. You may direct your inquiries via collect telephone call to New York, PLaza 7-7061, or by mail to Medical Department, Bristol Laboratories, 630 Fifth Ave., N. Y. 20, N. Y.

BRISTOL LABORATORIES · SYRACUSE, NEW YORK
Division of Bristol-Myers Company



ACUTE BRONCHITIS

SYNCILLIN
250 mg. t.i.d. – 6 days*

H.F. 45-year-old white female. First seen on Aug. 24, 1959 with acute bronchitis of 3 days' duration. Culture of the sputum revealed alpha hemolytic streptococci. A 250 mg. SYNCILLIN tablet was administered 3 times daily. Another sputum culture taken on Aug. 27 showed no growth. On Aug. 30, the patient appeared much improved and SYNCILLIN was discontinued. Recovery uneventful.

Illustrative case summary from the files of istol Laboratories' dical Department

THE ORIGINAL phenethicillin

SYNCILLIN®

(phenoxyethyl penicillin potassium)

FIRST SYNTHESIZED AND MADE AVAILABLE BY BRISTOL LABORATORIES

A dosage form to meet the individual requirements of patients of all ages in home, office, clinic, and hospital:

Syncillin Tablets – 250 mg. (400,000 units)... Syncillin Tablets – 125 mg. (200,000 units)
Syncillin for Oral Solution – 60 ml. bottles – when reconstituted, 125 mg. (200,000 units) per 5 ml.
Syncillin Pediatric Drops – 1.5 Gm. bottles. Calibrated dropper delivers 125 mg. (200,000 units)

*Streptococcal infections should be treated for at least 10 days to prevent the development of rheumatic fever and as prophylaxis against bacterial endocarditis in susceptible patients.

Complete information on indications, dosage and precautions is included in the circular accompanying each package

BRISTOL LABORATORIES, Div. of Bristol-Myers Co., SYRACUSE. N.Y. BRISTOL™

BOOK REVIEWS

continued from page 12

and adds greatly to the volume as a ready reference.

One wonders about the usefulness of this tome, obviously produced with great effort. It may have value as a reference for minor illnesses and accidents, and family discussions about medical subjects. For some households it may be true that "a little medical knowledge is a dangerous thing," and here damage could be done. With the rapid changes in medicine today, much information will be quickly outdated, requiring careful revision.

In summary, this is a notable effort to provide a "household guide" to health and medical problems. It contains a wealth of information, but should be recommended for home usage with definite reservations.

ROBERT W. DREW, M.D.

THE RELUCTANT SURGEON. A Biography of John Hunter by John Kobler. Doubleday & Co., Inc., Garden City, N. Y., 1960. $4.95

For the reader with an interest in medical history, John Kobler's biography of John Hunter is highly recommended. The author presents a thorough study of the life and times of the "founder of scientific surgery."

In addition to the accounting of Hunter's many original exploits in all branches of science, one is presented with an excellent picture of life in England during the eighteenth century. Of special interest are the accounts of the profound effects that both John Hunter and his brother William had on the development of American medicine. Several early American surgeons and physicians traveled to England to study with these great teachers. Upon their return to this country many of these men made great contributions to the growth of medicine here. One of these, Doctor John Morgan, founded the country's first medical school at the University of Pennsylvania. Of interest to local readers is the story of Doctor Benjamin Waterhouse, a Rhode Islander by birth, who in 1775, after serving an apprenticeship in medicine at Newport, traveled to London to study with John Hunter. Doctor Waterhouse's major contribution to medicine in this country after his return was the introduction of vaccination.

Apparently, John Hunter has been neglected by biographers in the past. In his preface to *The Reluctant Surgeon*, the author states that his work is "an effort to reclaim the scientist from the archives and the man from the shadows." I feel that he has successfully accomplished this purpose.

BANICE M. WEBBER, M.D.

WHAT PRICE MEDICAL CARE? A PREVENTIVE PRESCRIPTION FOR PRIVATE MEDICINE, by the author of the Australian National Health Plan, a former Prime Minister for Health of Australia, Doctor the Rt. Hon. Sir Earle Page. J. B. Lippincott Company, Phil., 1960. $3.50

In this book of 160 pages, Sir Earle Page, who is a surgeon with half a century of practice behind him, a member of the Australian Commonwealth Parliament, has served his country as Acting Prime Minister, Commonwealth Treasurer, Minister of Commerce, and Minister for Health, and has been Chancellor of the University of New England in Australia since its founding, presents a most lucid exposition of the Australian Medical Plan, which became the law of the land in 1953. This book is unique, and of extraordinary practical interest and importance because it deals not so much with theories as to what should be done, but with what has been done, has been tested by time, and has been successfully applied to the problems of medical economics in a country similar in many ways to the United States. It deals with the ways and means whereby Australia has met the same challenge that faces the American people.

There is a particular and urgent reason for the writing and publishing of Sir Earle's book about medical problems and the Australian formula for their solution. Medicine in the United States needs help. It needs help, and it needs it now, because ordinary and conventional approaches to the financing problem of people needing medical and hospital care will no longer meet an urgent public need. Hackneyed slogans about the sanctity of "free medicine" or the iniquities of so-called socialization will not help either. Campaign promises in an election year may hurt more than they help, if they hurry the American people into an ill-considered solution for the course of medical care.

In these pages Sir Earle emphasizes the need for co-operation of all concerned with public health and public welfare. They include hospital administrators, trustees, insurers, those who write for newspapers and edit them, employees and their union officials and representatives, and those occu-

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pied in government in all phases. Doctors especially will be obliged to learn to work together if the United States is to avoid the pattern of governmental medicine now dominant throughout the world except in the United States and Australia.

E. A. van Steenwyck, executive vice president of the Associated Hospital Service of Philadelphia, made the following pertinent comments in his introduction to this little, but important book:

"Despite all our progress in voluntary insurance against medical expenses in the United States, the most insistent questions remain unanswered. They include questions about the degree of coverage and extent of coverage for average income Americans, and the particular medical problems of older people and the repetitively ill. There is no satisfactory formula as yet to establish an appropriate relationship between government and the insuring groups or agencies in protecting all the people against crippling expenses for medical services. As providers of the services, hospitals and doctors have not yet found a common ground of co-operation. . . .

"Everyone knows what he wants in the way of medical care; he wants the best. Everyone also acknowledges that what he wants for himself and for his family ought to be available to all, whether they are able to pay or not. No price-tag can be put on health, but no plan for the nation's medical care is sound which lessens incentive to scientific progress or sacrifices the freedom of patients and physicians in the name of expediency. A common incentive is needed to resolve and consolidate these conflicts of interests and purposes. Sir Earle has contrived a plan which appeals to all the parties concerned and is approved by all. It solves the public problem, yet keeps medicine in Australia free from government domination. This, above all, makes the story important to Americans at this time." The basic features of the plan are explained and concern themselves with hospital care, medical benefits, the cost of drugs, and preventive medicine. Without going into too much detail, the essential points of each portion of these plans are worth mentioning in this review.

The hospital benefits scheme provides benefits to all qualified patients in approved hospitals. The Commonwealth provides what is called the "ordinary hospital benefit," paid on a per diem basis for patients in approved hospitals. This amounts to about 40 per cent of the cost of providing hospital care. In addition, under the plan, the Commonwealth supplements the ordinary benefit by an additional payment, amounting to half the ordinary benefit, for patients in approved hospitals who are also members of hospital insurance organizations registered for this purpose. The hospital insurance organizations are required to pay benefits from their own funds. These benefits may vary according to the rates of contribution by their members, and in some cases they provide benefits to meet the hospital charges in a particular state, but they must meet the minimum requirements in order for their members to be eligible for the supplementary payments made by the Commonwealth, over and above the ordinary hospital benefits. A certificate of hospitalization is presented to the patient who presents it to the private insurance organization. The organization pays the additional benefit on behalf of the Commonwealth as well as its own benefit and is then reimbursed by the Commonwealth. The effect of this plan is to provide continuous revenue to hospital managements. This in turn assures the provision and improvement of hospital services.

The general objective of the medical benefits plan is to "insure that everyone in Australia who makes provision through insurance will be able to cover the major cost of all surgical and medical attention, whenever or wherever sickness or accidents occur." To qualify for the benefit the patient must be a financial member of an approved medical insurance organization. The Commonwealth government will provide financial support of voluntary insurance against the cost of medical attention. The government's aim is that its subsidy, plus the payment from the private organization, should cover the major portion of the doctor's charges. The amounts

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of the benefits or subsidies that the government will pay are set out in a table of subsidies, covering every known medical service, treatment or procedure. The amount varies in relation to the nature of the medical service, but for any particular service it remains the same, whatever actual fee the doctor charges, or whether the service is rendered by a general practitioner or specialist. The government will not try to interfere in the administration of the private insuring organizations, though they will grant approval only to an organization that complies with certain minimum requirements and conditions, which are designed to protect the members. The approved insurance organizations will be free to decide for themselves whether the benefits, including the Commonwealth subsidy, will be paid directly to the member when he produces a receipted account from the doctor, or directly to the doctor on the authority of the member who presents an unpaid account. An important objective of the plan is to achieve stability in medical charges, so that insured patients may have some measure of certainty as to what their illness or injury will cost. In this manner the Australian medical profession has set a splendid example of restraint and good sense, though without impairment of professional rights or privileges. The doctor decides whether the patient should be admitted to a hospital and when he should be discharged. A reasonably constant scale of charges by physicians has been established, not by the *government* but by the doctors themselves. This is necessary in order to stimulate membership in the insured societies, which would be unable to guarantee adequate benefits to their subscribers if the doctors' charges varied over too wide a range. Actually each doctor is free to charge what he pleases, with due regard to what the patient is able and willing to pay, which may exceed, more or less, the benefits provided by his insurance. Obviously overcharges and other abuses are not subject to government intervention or control: *the doctors regulate and discipline themselves.*

Another very important feature of the Australian plan is the making available of "life-saving medicines" at a nominal charge at the Australian drugstore. A list of proved life-saving and disease preventing medicines have been selected by an advisory committee of expert medical specialists who may also recommend the exclusion or inclusion of specific remedies. Any qualified medical practitioner in Australia can prescribe or order these medicines. Excluded from the "free" list are some items that are mostly used for self-medication, or for trifling indispositions that do not need a doctor's care. The Australian plan does not want its people to become chronic pill-takers for every unimportant or imaginary ailment, as have many hypochondriacs in countries which have made all medicines free to the consumer.

In facing the problem of abuses of this system which requires the co-operation of the patient, the doctors, the hospital administrators, and the druggists, the National Medical Plan calls for the creation of a medical service committee, sometimes referred to as a "Supreme Court of Medicine," consisting entirely of doctors of unquestionable competence and integrity. The members are appointed by the Minister of Health from panels nominated by the British Medical Association of Australia. Cases of suspected irregularity or abuse on the part of doctors are referred to the committee by the Director General of Health. The committee then examines each case and gives the doctor the opportunity to be heard personally. If it is found that the doctor has failed to observe proper standards, appropriate punishment is recommended to the Minister. This punishment may be severe, even resulting in the withdrawal of the offender's right to receive payment from the insurance fund for his services. Experience has shown that the very existence of the committee, together with another representing the druggist, is an invaluable check on abuse. Experience also shows that the percentage of cases requiring disciplinary action by the committee is extraordinarily small. The overwhelming majority of doctors co-operate in the conduct of the Australian medical plan without any suggestion of irregularity.

A study made by a group of consultants concerning welfare, health, and pension programs in the United States stated: "Some doctors increase their fees in direct proportions to the amount of insurance money available. They include the insurance money as part of the ability to pay—and go on from there." Be that as it may in the United States, the Australian believes that it is far better for the medical profession to put its own house in order, rather than await the inevitable and heavy-handed interference of government when medical costs get too much out of line. Thinly veiled threats of such regulatory action have appeared in American periodicals, and the theme of governmental control of medical earnings may become a punching bag of politics in the United States, as is already the case in respect to the cost of certain medicines. We agree with Sir Earle when he states that there may be temptation to follow the lead of other countries into the pitfalls of socialized medicine, but there is a far more inspiring opportunity to find a better, wiser way to solve our problems. He continues: "Borrow from the Egyptians all you can use, as the Israelites did when they escaped to the wilderness in the Promised Land. Borrow advice and warning from those who have tried other systems of medical planning and discover their dangers and weaknesses. Borrow from Australia, if you please,

our experience with the plan which has worked well and smoothly for years and may be made to work even better in a bigger, richer country. We in Australia have borrowed and learned much, so much from you; we will be proud and happy to lend you something of our own.

"But whatever and whenever she may borrow, America's world leadership in medicine is secure if she remembers and defends the principles which made her a nation while Captain James Cook was still feeling his way along our coastline. It was nearly twelve years after the Declaration of American Independence that the first British colony was founded at Botany Bay and an Australian history began. Now the world of medicine awaits to see what the Americans will do. In 1776 freedom and independence were the paramount issues in politics and the theory of government, as they are today in medicine."

Sir Earle has stated that this book is his effort to repay a debt that he owes to the United States. If we learn what he is trying to teach us it will be ourselves who will forever be in his debt.

STANLEY D. SIMON, M.D.

CURRENT SURGICAL MANAGEMENT II. A Book of Alternative Viewpoints on Controversial Surgical Problems. Edited by John H. Mulholland, M.D., Edwin H. Ellison, M.D., and Stanley R. Friesen, M.D. W. B. Saunders Company, Phil., 1960. $8.00

At the outset, one should say that CURRENT SURGICAL MANAGEMENT II is considered worthwhile and rewarding reading. The following topics are discussed: duodenal ulcer, polyps of the colon, diaphragmatic hernia, pancreatico-biliary surgery, pilonidal sinus, carcinoma of the breast, intestinal obstruction, arterial insufficiency, thromboembolism, renal failure, colon preparation for surgery, and prolapse of the rectum. Each section is presented by an authority in his field. Representative viewpoints are submitted where controversy is said to exist. The articles are not bogged down in detail by case reports, lengthy statistical quotations, or experimental data. They are more narrative in type, resembling panel discussions so popular at surgical meetings.

In the book, as at the meetings, there is reason to believe that the word "controversy" has been overworked. One of the editors, Dr. Mulholland, introduces the "controversy" concerning common duct stones by saying, "There is no present-day controversy about the desirability of removing all stones . . ." Dr. Baker and others describe their satisfactory experience with operative cholangiography. Dr. Ferris, in presenting his case for the detection of common duct stones by means of surgical exploration, states the alternative viewpoint, or the other half of the "controversy," and says that no single finding or maneuver detects common duct stones infallibly, and that the surgeon must utilize *every* means available. Dr. Ferris, incidentally, has always been a principal protagonist for operative cholangiography at the Mayo Clinic. Complementary, indeed, coinciding viewpoints thus have somehow been fitted into a format of controversy. Perhaps the injection of the element of controversy stimulates added interest to a given problem.

The book is attractively printed and bound, and contains 348 pages. The type is pleasantly legible. There should be no controversy about recommending CURRENT SURGICAL MANAGEMENT II.

J. E. CARUOLO, M.D.

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BENEFIT PAYMENTS BY INSURANCE COMPANIES

During the first nine months of 1960 some $2,342 million in health insurance benefits were received by Americans from the nation's insurance companies. This was an increase of eight per cent over the same period in 1959. A distribution of benefits according to type of coverage for the first nine months of 1959 and 1960 follows:

Type of Coverage	*9 months 1960*	*9 months 1959*	*% increase*
	(in millions of dollars)		
Hospital Expense*	$ 933	$ 853	9.5%
Surgical Expense*	321	312	3.1
Regular Medical Expense	88	80	9.4
Major Medical Expense	309	243	26.8
Loss of Income**	691	680	1.6
TOTAL	$2,342	$2,168	8.0%

*Excludes benefits for hospital and surgical expenses received by major medical expense policyholders.

**Includes accidental death and dismemberment benefits.

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Source: Harrison, T. R., *et al.:* Principles of Internal Medicine, ed. 3, New York, McGraw-Hill Book Co., 1958, p. 620.

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THE WASHINGTON SCENE

A Summary Report Prepared by the Washington Office of the American Medical Association

PHYSICIANS ARE BEING URGED to co-operate fully to get their states to participate as soon as possible in the new federal-state program for medical care of needy and the near-needy older persons.

The medical profession also has been alerted to the dangers of relaxing its opposition to tying in medical care of the aged with Social Security. It is probable that the Kennedy Administration will try in 1961 to get Congressional approval of such legislation.

E. Vincent Askey, M.D., president of the American Medical Association, pointed out to the recent Washington meeting of the A.M.A. House of Delegates that proponents of the Social Security approach had a pledge of support from the successful Democratic candidate for President.

"While our profession clearly may face a hard struggle in the 87th Congress on the issue of medical aid for the aged under Social Security, there is no ground for defeatism!" Dr. Askey said.

"Our cause is far from lost. We know that our policy position is in the best interests of all Americans, the aged included, and our willingness to defend this policy must be strengthened and maintained."

Doctor Askey reminded the House of Delegates that "medicine has many friends in both parties in Congress today."

A few days later, Sen. Harry F. Byrd (D., Va.), chairman of the Senate Finance Committee which handles Social Security legislation, reiterated his opposition to a compulsory medical care plan under Social Security. He said:

"I am opposed to the (Democratic party) platform recommendation for compulsory medical service and hospitalization under the Social Security system. I am convinced this would lead to socialized medicine with the possibility that it would bankrupt the Social Security trust fund. This matter came before the Finance Committee and was fought out in the post-convention session of Congress last August. The Senate voted 51 to 44 in opposition to the Democratic platform proposal, and instead adopted a fair plan for medical service and hospitalization for those in need of it."

Doctor Askey urged that all county and state medical associations provide "the medical leadership necessary to implement the Mills-Kerr bill (the new federal-state program) as rapidly as possible." And the House of Delegates adopted such a resolution.

"We must put forth a sincere and concentrated effort during the coming year to make the Mills-Kerr law effective, to show that it can, practically as well as potentially, solve the problem of medical care for the aged," Doctor Askey said.

President-elect John F. Kennedy's first Cabinet appointment was Governor Abraham Ribicoff of Connecticut as secretary of Health, Education and Welfare — the official with primary responsibility for carrying out the federal part of the Mills-Kerr program.

Ribicoff, fifty, was an early supporter of Kennedy for the Presidential nomination. He was twice elected governor of Connecticut. Before that, he served as a Hartford, Conn., police judge, a member of the state legislature and a member of the national House of Representatives. As governor, he inaugurated a comprehensive traffic safety program with strong penalties.

* * *

The Sabin oral polio vaccine will not be available in sufficient quantity in 1961 for large scale use.

Leroy E. Burney, M.D., surgeon general of the U.S. Public Health Service, told the recent clinical meeting of the A.M.A. that many problems involved in taking the oral vaccine out of the laboratory and into mass production had not been solved.

In light of this fact, both the A.M.A. House of Delegates and Doctor Burney urged that the widest possible use of the Salk vaccine be encouraged. Doctor Burney said that large numbers of the U.S. population, including almost half of the children under five, had not been fully vaccinated with the effective Salk vaccine.

Doctor Burney said the problems of integrating the oral vaccine into the present program of immunization against polio "are many and complex."

"Only the future can tell whether control of poliomyelitis will be accomplished through a live,

concluded on page 21


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There was no blood pressure increase in any patient treated for bronchial asthma, and in some, blood pressure fell. Of these, three had been hypertensive.[4]

References:

1. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.
2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959.
3. Friedlaender, S., and Friedlaender, A. S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958.
4. Sherwood, H., and Cooke, R. A.: *J. Allergy* 28:97 (March) 1957.

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of allergic respiratory disorders, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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THE WASHINGTON SCENE

concluded from page 20

orally administered vaccine, the killed vaccine, or a combination of both," Doctor Burney said.

* * *

The Food and Drug Administration issued stricter rules, some effective January 8 and others effective March 9, governing promotion and marketing of prescription drugs. The new regulations are designed to insure safe use of the drugs.

Under the new regulations, manufacturers must disclose hazards, as well as advantages, of the drugs in promotional material sent to physicians. Manufacturers can be denied permission to market drugs they refuse to permit FDA inspection of manufacturing methods, facilities, controls or records.

The FDA deferred until later action on its proposal to require every package of drugs sold to pharmacies to contain an official brochure on their use and hazards. The A.M.A. proposed instead that it be given the responsibility of getting such information directly to physicians.

* * *

Foreign interns who failed medical examinations last September may remain in this country until at least next July 1.

In co-operation with the State Department, the A.M.A. agreed to extend for six months a January 1 deadline for dismissal of foreign interns unless they pass the examinations through the Educational Council for Foreign Medical Graduates.

The flunking interns will be given another opportunity to take the examinations in April. Meantime, they must be taken off patient care and their hospitals must set up training programs for them.

The A.M.A. Council on Medical Education and Hospitals, said that this policy would be carried out judiciously and that occasional exceptions would be granted where circumstances warranted.

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Joseph Hansagi, M.D., Kent County Memorial Hospital, Warwick, R. I. — Medical School in Hungary — *Pathology.*

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Louis M. Sod, M.D., 345 Armistice Boulevard, Pawtucket, R. I. — University of Virginia Medical School — *Radiology.*

Marian Zawirski, M.D., 75 Blackstone Street, Cumberland, R. I. — Medical School in Poland — *General Practice.*

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Erwin Backrass, M.D., Box 5, Howard, R. I. — Medical College in Germany — *Psychiatry.*

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John F. Lowney, M.D., 314 Angell Street, Providence 6, R. I. — Georgetown University Medical School — *Psychiatry and Neurology.*

John F. McCarthy, M.D., 251 Waterman Street, Providence 6, R. I. — New York Medical College — *Psychiatry.*

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Sui Yen Wang, M.D., Hartford Pike, North Scituate, R. I. — Medical School in China — *General Practice.*

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Progress Notes . . .

MANAGEMENT OF THORACIC TRAUMA*

PAUL C. ADKINS, M.D.

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INJURIES to the thoracic cage and its contents are an everyday occurrence in this modern age. An understanding of the alterations in physiology which occur as a result of such injuries are essential for logical management and ultimate survival of the patient. The objective of management of thoracic injuries is restoration of cardiopulmonary function to normal as quickly as possible. Basically, this involves restoration of a normal circulating blood volume and adequate oxygen supply to all body tissues. Experiences in World War II and subsequent years have indicated that, in the vast majority of instances of injury to the thoracic viscera, early thoracotomy is unnecessary and may be harmful; other, more simple measures in the early management of these cases yield far more satisfactory results.[4,8] These measures are termed resuscitation and involve early recognition of the patient's condition, treatment of shock, maintenance of an open airway, management of sucking wounds of the thorax, recognition of hemothorax and pneumothorax, and relief of pain and anxiety. During this early phase of therapy, typing and cross-matching of blood, intravenous fluid therapy, and roentgenograms of the chest may be accomplished. After these have been carried out, and full evaluation of the situation made, decisions can be then made regarding the necessity for subsequent surgical management.

Trauma does not respect anatomical barriers, and in many instances multiple injuries are present. Nevertheless, restoration of cardiopulmonary function is the prime objective, and immediate survival is dependent upon achieving this objective. Once this has been accomplished, efforts may then be directed towards management of injuries of the abdominal viscera, neurosurgical problems, and fractures. More often than not, particularly where several individuals are involved in an accident or other form of catastrophe, varying numbers of physicians, surgical specialists, house officers, and other personnel may be involved in the resuscitative effort. It is essential under these circumstances that one individual assume the responsibility of direction of the effort, determination of priority of treatment, and co-ordination of varying phases of management. In other words, when there is a team effort there must be a captain, and it makes little difference who this is as long as everyone recognizes his direction. Without this, well-intentioned but unco-ordinated efforts may result in unnecessary delay and even loss of life.

Regarding evaluation of the patient, the initial appearance may be extremely misleading. Small, almost insignificant stab wounds with no other signs of external violence may cause disastrous changes in the vital mechanisms. On the other hand, the patient who is cyanotic and in shock often may be resuscitated by a few relatively simple measures. This is especially important in the busy emergency room where minimal signs of external violence may be overlooked with disastrous consequences.

In order to achieve adequate resuscitation, a knowledge of the essential components of the cardiopulmonary mechanism is necessary. These include: 1. adequate circulating blood volume, 2. an intact chest wall, 3. an open airway, 4. maximum expansion of the lungs, and 5. normal intrapleural pressures.

Although alterations in most of these factors will overlap in any type of trauma, for purposes of discussion they will be covered separately.

Shock

The classical clinical manifestations of shock, the underlying pathophysiology, and general principles of management are well known, so will not be discussed. It should be pointed out, however, that hidden blood loss is a very common occurrence in trauma. Splenic rupture is a frequent companion of injuries of the left lower chest and must always be considered. Intrathoracic bleeding will be dis-

continued on next page

*Read at the John F. Kenney Memorial Clinic Day, at the Memorial Hospital, Pawtucket, Rhode Island, on November 2, 1960.

cussed subsequently. Early and adequate transfusions for patients with blood loss are an essential part in the resuscitative effort.

On the other hand, partial suffocation may play an important role in the shock picture. Consequently, when inadequate air exchange is present, early efforts at restoration of an open airway may be the most essential portion of the management. In the patient with major thoracic trauma, the traditional Trendelenburg position used in the treatment of shock may actually be harmful, since it places weight on the diaphragm and interferes with its function. The semi-Fowler's position with maximum opportunity for diaphragmatic motion is preferable. This is also the position of choice for transportation of the patient with thoracic injuries. If prompt clearing of the airway is not obtained by suction, early tracheostomy should be performed.

Simple Chest Wall Injuries

A fractured rib may be termed a simple injury, and it often is in a young robust individual. However, if this occurs in an aged or debilitated person it may become quite complex. Chest wall pain, as a result of the fracture, with diminution of excursion of the involved side of the chest, diminished ventilation, subsequent atelectasis and possibly pneumonia and severe embarrassment of pulmonary function may result (Figures 1, 2). Strapping of the chest is not a very effective method of immobilization of the chest wall and is mainly of psychological value. Circumferential wrapping of the thoracic cage is a more efficient method of immobilization, but may also significantly interfere with ventilation. Thus if circumferential wrapping is to be used, the patient must be checked carefully for any signs of respiratory embarrassment. Restoration of an efficient cough mechanism is essential to avoid atelectasis and its accompanying problems which are frequently associated with the painful rib fracture. Probably the most satisfactory method of management is intercostal nerve block which relieves the pain and allows the patient to cough efficiently. Drugs which may depress respiratory function or significantly interfere with the cough mechanism should be avoided in the management of these problems.

The rib fracture with separation of the fragments may result in a laceration of the intercostal vessels accompanying the rib with consequent bleeding or may cause an injury to adjacent pulmonary tissue, resulting in hemothorax, pneumothorax, or both (Figure 3). When a pulmonary laceration occurs in an area where the lung is stuck to the chest wall, considerable subcutaneous emphysema may ensue.

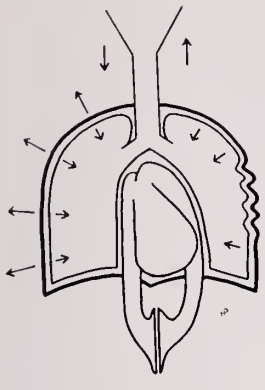
Another consideration in chest wall injuries is that situation where there are multiple rib fractures, resulting in the so-called "flail chest." This type of injury of the ribs or the sternum is a frequent consequence of auto accidents and abrupt contact with the steering wheel. In this situation there is marked paradoxical motion of the involved portion of the thoracic cage with resultant reduction in the function of the underlying lung. In addition, there is severe pain and loss of an effectual cough mechanism. This usually results in the "wet lung syndrome" in which there is not only blunt trauma to the involved lung but retention of secretions as well. It was Doctor Noland B. Carter[6] who first pointed out the effectiveness of tracheostomy in this situation. In a flail chest injury, early tracheostomy has several benefits:

1. It reduces dead space of the upper respiratory system, resulting in more efficient ventilation.
2. It enables the physician or nursing staff to perform simple and frequent tracheal aspirations to get rid of secretions.
3. It reduces resistance by bypassing the upper air passages, consequently reducing the amount of change in pleural pressures in order to achieve adequate ventilation. This consequently reduces the amount of paradoxical motion of the chest wall.

In addition to tracheostomy, intercostal nerve block of the involved rib areas diminishes the accompanying pain. External traction of the paradoxical area of the chest wall is rarely necessary, and generally if a tracheostomy has been performed a little mild pressure to reduce paradox is preferable. In the patient with other severe injuries, particularly a head injury, or the patient who is exhausted and unable to achieve adequate respiratory exchange, a mechanical ventilator which has a positive and negative phase may be attached to the tracheostomy to maintain adequate air exchange.[2]

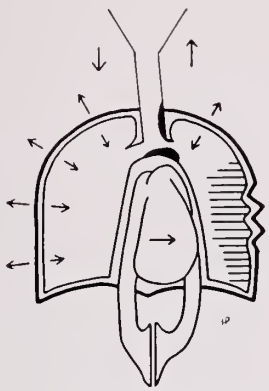
Penetrating Wounds

Penetrating wounds of the chest wall may vary from a minute stab wound, produced by an ice pick, to a large sucking wound with considerable loss of tissue. When there is a sucking wound of the chest wall, air rushes into the pleural space causing collapse of the lung on the involved side (Figure 4). In addition, this pushes the mediastinum to the opposite side causing further reduction in the vital capacity. On expiration, the mediastinum swings back towards the involved side, and this phenomenon, known as "mediastinal flutter," still further reduces venilatory ability. Mediastinal flutter also interferes with cardiac filling with consequent reduction in cardiac output



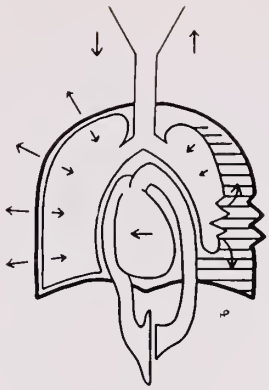
PAIN

FIGURE 1



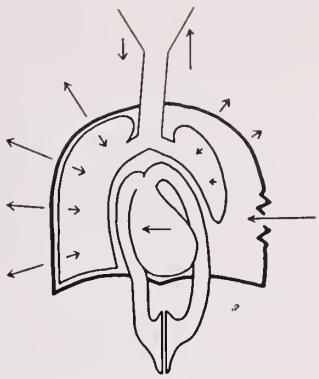
ATELECTASIS

FIGURE 2



HEMOTHORAX

FIGURE 3



PNEUMOTHORAX

FIGURE 4

and interference with the circulatory mechanism.

The management of sucking wounds of the chest consists first of conversion from an open to a closed wound. This may be accomplished by the use of Vaseline® gauze, adhesive tape, or any kind of dressing which may be available, even a hand in the case of emergency. It is important to remember that, if dressings or packing are used to close the open wound, they should not be stuffed into the pleural space, since they may interfere with re-expansion of the lung.

Pneumothorax

The presence of air in the pleural cavity or in the pleural space alters the intrapleural pressure from its normal slightly negative level to an atmospheric or positive level. This results in shift of the mediastinum towards the opposite side. The objectives in treatment are removal of the air from the pleural space, full re-expansion of the lung, and restoration of normal negative intrapleural pressures. One often hears the term "tension pneumothorax." The term "progressive tension pneumothorax" is preferable. This implies that pressure is building up, due to continued leakage of air into the pleural space causing increased positive intrapleural pressure and further shift of the mediastinum towards the opposite side with resultant interference with the function of the opposite lung. Simple aspiration of air from the pleural space using a needle and syringe may be adequate if there is no injury to the visceral pleura or lung parenchyma. However, in thoracic trauma, if a pneumothorax is present, there is frequently injury to the lung itself. Under these circumstances, we prefer to achieve re-expansion of the lung by use of a catheter placed in the pleural space through an intercostal stab wound and attached to water seal drainage. This catheter should be placed high anteriorly, preferably in the second interspace in the anterior axillary line. It is placed there so that, with the patient in the semi-Fowler's position, air will usually rise to the uppermost portion of the pleural space. Thus this is an optimum position to drain all the intrapleural air. Catheters that are placed lower down will generally achieve only partial re-expansion of the lung. Simple water seal drainage is generally sufficient unless there is a large parenchymal tear, and the patient is losing more air through the tear in the lung than the catheter is able to evacuate. Under these circumstances, water seal suction is utilized to evacuate the air as rapidly as it is given off.

Once a catheter has been inserted in the second interspace anteriorly and attached to water seal drainage, the lung should re-expand rather promptly. If this does not occur, and the patient continues to blow large amounts of air into the water seal bottle, the possibility of injury to a major bronchus or to the trachea must be considered. This may be confirmed by bronchoscopy, which will also localize the site of injury. Once this diagnosis has been established, early thoracotomy and repair of the tracheal or bronchial laceration is imperative.[7]

Hemothorax

Bleeding into the pleural space may come from either the systemic or plumonary vessels. The most frequently injured systemic vessels are the intercostal vessels or the internal mammary vessels. Bleeding from the pulmonary parenchyma may be either from pulmonary arterial or pulmonary venous sources. Since the pressures in the pulmonary system are low, fatal hemorrhage from pulmonary lacerations is uncommon. On the other hand, bleeding from the systemic vessels may be quite large and usually requires rather prompt intervention. Generally a hemothorax is associated with a penetrating wound but may be also due to

continued on next page

blunt trauma. Unless the bleeding is obviously severe and requires immediate operative intervention, the general plan of management is to aspirate the blood. Aspiration should be done at a dependent level, and as much blood as possible should be removed. There has been some notion that early aspiration might provoke further bleeding. This has proved to be untrue, and early aspiration of all blood is essential for restoration of normal cardiopulmonary function as well as an initial resuscitative effort. Should rapid re-accumulation of blood occur, the bleeding is probably from a systemic vessel or major pulmonary vessel, and surgical intervention is indicated.

The use of fibrinolytic enzymes in the management of hemothorax has been advocated, but our experience with this has generally not been satisfactory, especially when there is known trauma to the lung or visceral pleura. We have seen at least five broncho-pleural fistulae which were probably associated with the use of these enzymes. Catheter drainage of a hemothorax alone is not advisable since the probability of infection of the blood in the pleural space is great, with the consequent problems of empyema. When a hemothorax and pneumothorax are present together, decompression of the pneumothorax by a catheter attached to water seal drainage and needle aspiration of the hemothorax is the preferable method of management.

Cardiac Wounds

Wounds of the heart are usually the result of penetrating injuries of the chest wall, either by knives or other missiles. On the other hand, blunt injury to the anterior chest wall may result in major injury to the heart itself with hemopericardium and cardiac tamponade. This possibility should not be overlooked, particularly in steering wheel injuries, as the manifestations may not develop until several hours or even more after the initial injury.

Considering penetrating injuries of the heart, one of three things may occur. The first is that the injury may be so slight that no serious changes in the cardiac mechanism may be incurred. Secondly, the patient may die immediately, generally as the result of injury to the conduction bundle or to a coronary vessel. Thirdly, bleeding may occur into the pericardial sac (less commonly into the pleura) and cardiac tamponade may occur. The patient does not die immediately; there may be a latent period when the patient gets over the initial shock of the injury and gets up and thinks that he is all right. Then, within thirty minutes to an hour, weakness and syncope may occur as a result of the bleeding into the pericardial sac. It is in this situation that the alertness of the physician is essential in saving the patient. The classical triad of Beck for acute cardiac tamponade is an increased venous pressure, a narrow pulse pressure, and a small quiet heart.[3] Of these signs, the small quiet heart is the least reliable, since we have seen patients in frank cardiac tamponade with easily audible heart sounds. If cardiac tamponade is suspected, aspiration of the pericardial sac is essential. When bleeding occurs rapidly, a few hundred cubic centimeters may be quite sufficient to cause marked interference with venous filling of the heart and produce all the manifestations of tamponade. Aspiration of as little as thirty or forty cubic centimeters may be sufficient to relieve the acute pressure and revive the patient. Pericardial aspiration is preferably performed through the subxyphoid route, although the apical route may be utilized. If the diagnosis is in question and there is sufficient time, a venous pressure determination may be made; fluoroscopy of the heart may be helpful in ascertaining the presence or absence of visable pulsations, and an electrocardiogram may demonstrate marked diminution in the voltage of the tracing.

Simple pericardial aspiration is generally successful in relieving the immediate effects of tamponade by removal of some blood. There is some difference of opinion about subsequent management of cardiac tamponade as a result of a stab wound, however. The work of Blalock and Ravitch[5] indicated that the majority of these patients could be managed without operation, simply by one or repeated aspirations of the pericardial sac. On the other hand, it is generally our present policy, if, after the first aspiration, evidences of tamponade recur and repeat aspiration does not immediately relieve them that thoracotomy is necessary. In the past several years, we have more frequently resorted to thoracotomy in the management of hemopericardium since it is virtually impossible to remove all the blood by simple aspiration. If most of the blood is not removed, many of these patients may subsequently develop organization and constrictive pericarditis. The incision is generally made in the fourth or fifth left interspace anteriorly with division of the coastal cartilage. This affords adequate exposure of most of the anterior surface of the heart. If, however, the wound is definitely on the right side, we would generally approach the heart through a similar incision in the right chest. Once the pericardium has been opened and the site of injury exposed, bleeding can be controlled by the finger while sutures are placed beneath the finger to approximate the myocardium. In the vast majority of instances in which open operation has been performed, we have been glad that we did so either from the nature of the injury or from the amount

of residual blood in the pericardial sac.

Injuries of the Esophagus

Wounds to the esophagus from external trauma are rare since this is a well-protected structure. A great majority of esophageal wounds are caused by internal violence from endoscopic examination. The most common sites of injury are the cervical esophagus and the lower third of this organ. Esophageal laceration may be suspected by the nature and location of the injury and is confirmed by a swallow of radiopaque material. For this purpose, Dionisil® is preferable to barium. Esophageal perforations are usually accompanied by mediastinal or subcutaneous emphysema or hydropneumothorax. Generally there is severe chest pain particularly in the substernal region. If the diagnosis is made sufficiently early, the treatment of choice is definitive closure of the laceration. This must be accomplished within the first twenty-four hours after injury, since suture of the esophagus after this period is virtually impossible because of the accompanying tissue reaction. If the diagnosis is not apparent or if definitive treatment cannot be instituted in the first twenty-four hours, simple drainage of the area is preferable. In the case of the cervical esophagus, the retrovisceral space must be drained, and in the case of the intrathoracic esophagus, wide drainage of the pleural space is essential.[1]

Diaphragm

Injuries to the diaphragm may be caused by blunt trauma or by penetrating wounds. Rupture of the diaphragm is a frequent result of blunt abdominal trauma but may also be caused by compressing injuries of the chest. The left side of the diaphragm is more frequently involved than the right. The defect is usually through the dome of the diaphragm, and blunt injury serious enough to cause rupture of the diaphragm is in most patients accompanied by other damage to the thoracic or abdominal viscera. Repair of the rupture of the diaphragm should be carried out as soon as the patient's general condition permits. Penetrating wounds of the diaphragm are important in that there is almost invariable injury to other organs. It is essential to remember that, on deep inspiration, the diaphragm ascends as high as the fourth rib anteriority and attaches to the eleventh rib posteriorly. Consequently, a penetrating wound fairly high in the chest may also involve the abdominal viscera by going through the diaphragm, and conversely injuries low down in the abdomen may also involve the diaphragm and result in intrapleural problems. If this is borne in mind, such injuries will not be overlooked.

References

[1]Adkins, P. C.: Management of Esophageal Perforations, Am. Surg., Oct., 1955

[2]Avery, E. E.; Morch, E. T., and Benson, D. W.: Critically Crushed Chests, J. Thorac. Surg., 32:293, 1956

[3]Beck, C. S.: The Management of Wounds of the Heart, Surgical Clinics of North America, Philadelphia, 1958, W. B. Saunders Co., 1557

[4]Blades, B.: Emergency Treatment of Traumatic Chest Injuries, Surgical Clinics of North America, Philadelphia, Oct., 1940, W. B. Saunders Co., 1473

[5]Blalock, A., and Ravitch, M. M.: A Consideration of the Nonoperative Treatment of Cardiac Tamponade Resulting from Wounds of the Heart, Surgery, 14:157, 1943

[6]Carter, B. N., and Giuseffi, J.: The Use of Tracheotomy in the Treatment of Crushing Injuries of the Chest, Surg., Gynec., & Obst., 96:55, 1953

[7]Paulson, D. L.: Traumatic Bronchial Rupture with Plastic Repair, J. Thoracic Surg., 22:636, 1951

[8]Shefts, L. M.: The Initial Management of Thoracic and Thoraco-abdominal Trauma, Springfield, Ill., 1956, Charles C Thomas, Publisher

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TEN-YEAR REVIEW OF BRONCHOGENIC CARCINOMA IN A COMMUNITY HOSPITAL*

J. JOHN YASHAR, M.D., AND THOMAS MICOLONGHI, M.D.

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DURING a ten-year period from January 1, 1950, to December 31, 1959, a clinical diagnosis of primary lung cancer was entertained in 103 ward and private patients at the Memorial Hospital. In 86 patients the diagnosis was verified by histologic and cytological means, the material being obtained by bronchoscopic biopsy, bronchial washings, biopsy of supraclavicular nodes and metastatic implants, biopsy at the time of thoracotomy, examination of the resected specimen or by postmortem study. Specifically excluded are all cases of metastatic carcinoma and bronchial adenoma. The nature and behavior of the latter group are sufficiently different to warrant exclusion from the group commonly termed bronchogenic carcinoma. Careful follow-up study in 85 out of 86 proven cases were obtained (98%).

Clinical Data

YEARLY INCIDENCE. The number of patients admitted with the diagnosis of lung cancer has gradually increased over the past ten years. During the early part of this study only one to two patients per year were admitted; however, during the past few years ten to sixteen patients were seen annually (Figure 1).

AGE AND SEX. Age and sex distribution did not differ significantly from other reported series.[1,2,3] The age of these patients at the time of admission to the hospital ranged from 33 to 82 years (Figure 2). Seventy-three per cent were in the fifth and sixth decades. The male sex was predominant in a ratio of about eight to one.

SYMPTOMS. Three patients in the entire series were asymptomatic. The majority of patients had two or three symptoms. Persistent cough, weight loss, dyspnea, chest pain, and hemoptysis were the chief complaints (Table I). It is to be

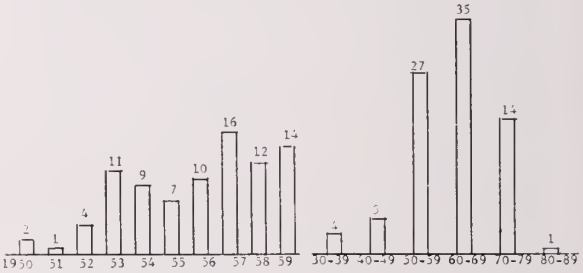


Fig. I - Year Distribution

Fig. 2. Age Distribution

emphasized that, although cough was persistent in a high percentage of patients, it was by no means a constant complaint. The high incidence of weight loss and chest pain suggests the advanced state of the disease in many of our patients. Thirteen patients (15%) were diagnosed and treated as unresolved pneumonia for periods of four weeks to four months (average two and one-half months). In eighteen patients (21%) the initial complaint which prompted the patient to seek medical attention was caused by distant metastasis indicating inoperability (Table II).

DURATION OF SYMPTOMS. The average duration of symptoms before the diagnosis was established was four and one-half months. Seventy per cent of the patients had symptoms more than three months, 45% more than six months, and 20% more than a year. Three patients

TABLE I

Symptoms in 86 Proven Cases

Symptoms	*No. of Cases*
Asymptomatic	3
Cough	47
Weight Loss	32
Dyspnea	26
Hemoptysis	22
Chest Pain	18
Unresolved Pneumonia	13
Pleurisy	4
Pulmonary Osteoarthropathy	2
Others	18

*Read at the Annual John F. Kenney Clinic Day, at the Memorial Hospital, Pawtucket, Rhode Island, on November 2, 1960.

TABLE II
Presenting Symptoms Indicating Inoperability

Symptoms	*No. of Patients*
Headache and Confusion (cerebral metastasis)	2
Backache and Paraplegia	4
Hoarseness	1
Palpable supraclavicular nodes	5
Pain (long bone metastasis)	2
Weakness (widespread metastasis)	4
Total	18

TABLE III
Duration of Symptoms

Duration — Months	*No. of Cases*
> 1	7
1-3	23
3-6	26
6-9	13
9-12	11
12-18	3
18-24	3

had symptoms for more than two years (Table III).

BRONCHOSCOPY AND BRONCHIAL WASHINGS. Bronchoscopy was performed in 56 patients. The findings are listed in Table IV. Definite histologic proof was obtained in 55% of cases. In 15 cases (28%) bronchoscopic study was entirely negative. There has been a high degree of success in obtaining positive cytologic findings in bronchial washings; 75% of bronchial washings were found to be positive. In twenty patients with normal bronchoscopic findings or with simple edema of the bronchial mucosa, bronchial washings were positive in nine cases (45%) (Table V).

SCALENE NODE BIOPSY. Since the original reports of Daniel[4] on scalene node biopsy and of Harken[5] on mediastinal node biopsy, a considerable amount of interest has been manifested in the application of these techniques in the preoperative evaluation of lung malignancy. Scalene node biopsy was performed in twenty-seven cases, and positive biopsy was obtained in ten instances (37%). In five patients large supraclavicular nodes were palpable on physical examination, and these were in every instance positive on histological study. Of the remaining twenty-two cases with no palpable nodes, five patients (22%) showed lymphnode invasion by neoplastic tissue (Table VI).

TABLE IV
Bronchoscopy Findings

Normal	15
Edema of Mucosa	5
Tumor	20
Distortion and Fixation	4
Narrowing	12
Total	56

TABLE V
Bronchial Washings

Bronchoscopy Findings	*No. of Cases*	*Positive*
Total Cases	56	42
Normal or edema of mucosa	20	9
Tumor, distortion and narrowing	36	33

TABLE VI
Scalene Node Biopsy (27 Cases)

Physical Findings	*Number of Cases*	*Positive*	*Per Cent*
All Cases	27	10	37%
Palpable Lymph Nodes	5	5	100%
No Nodes Palpable	22	5	20%

LOCATION. The right lung was involved by tumor in 48 patients (56%), and the left in 38 (44%). The upper lobes were the predominant site of the disease (47 cases or 56%) and were involved with about equal frequency. The distribution is shown in Table VII.

TABLE VII
Location (86 Cases)

Bronchus	*Number*
Right	
Upper Lobe	23
Middle Lobe	5
Lower Lobe	18
Main Stem Bronchi	2
Total	48
Left	
Upper Lobe	24
Lower Lobe	9
Main Stem Bronchi	5
Total	38

Pathology

A simple classification of carcinoma of the lung which has been widely accepted among surgical paothologists is used at the Pawtucket Memorial Hospital:

a). Epidermoid carcinoma
b). Undifferentiated carcinoma
c). Adenocarcinoma
d). Alveolar-cell (or bronchiolar) carcinoma

A neoplasm is classified in the epidermoid carcinoma group only if it shows some evidence, though minimal, of keratin or prickle cell formation. All

continued on next page

degrees of differentiation may be encountered, even in different areas of the same tumor.

The undifferentiated carcinoma group includes a number of different growth patterns designated as oat-cell type, large-cell type and giant-cell type. One case of undifferentiated giant-cell carcinoma is included in our series. This tumor was composed chiefly of pleomorphic multinucleated giant cells and while in some areas the pattern of cell growth imitated a sarcomatous neoplasm, in others it clearly suggested an epithelial origin. Nash and Stout have reported 5 cases of this neoplasm,[15] emphasizing the extremely grave prognosis and pointing out that the duration of symptoms and average survival rate were shorter than for any of the other histological variants of lung cancer.

Adenocarcinoma must be carefully differentiated from alveolar-cell carcinoma and metastatic adenocarcinoma. This at times may be difficult. The distribution of the histopathological types of tumor in our series is seen in Table VIII. Thirty-four patients had epidermoid carcinoma (43%). Undifferentiated and "oat-cell" carcinoma made up 30% of the group. There was one case of carcinoma *in situ;* in this case the bronchial washings were positive, but histologically the lesion showed only *in situ* malignancy. The proportion of epidermoid carcinoma, undifferentiated carcinoma and adenocarcinoma is in close agreement with that recorded in the literature.

TABLE VIII
Histologic Diagnosis (78 Cases)

Type	*Number*
Epidermoid Carcinoma	34
Undifferentiated Carcinoma	28
(Oat-cell carcinoma 5)	
(Giant-cell carcinoma 1)	
Adenocarcinoma	12
Alveolar cell (bronchiolar) carcinoma	3
Carcinoma *in situ*	1
Total	78

Treatment and Results

For better analysis of the results for the entire series the patients were divided in four groups:

I. Far Advanced and Terminal. These patients were in the terminal stage of the disease, being cachectic and having extensive carcinoma or generalized metastases. In each of these instances the diagnosis was verified by appropriate biopsy material. There were 25 patients in this group, and none have survived. Eight patients received nitrogen mustard and/or X-ray therapy. The majority were dead within a month; X-ray or nitrogen mustard did not seem to improve the life expectancy of these patients.

II. Inoperable. Although there was no evidence of distant metastases in these patients, they were considered inoperable on clinical and bronchoscopic grounds. Recurrent laryngeal nerve involvement, invasion of the mediastinal structures, encroachment by the tumor upon the carina or trachea, supraclavicular and scalene node involvement, pulmonary insufficiency and coexisting severe cardiac or renal disease were considered to be definite evidence of inoperability. There were 31 patients in this group. Ten patients received nitrogen mustard, X-ray therapy, or both. All patients in this group are dead from the disease; 65% of these patients were dead within six months, and only one patient was alive after a year. The average survival time was six months.

III. Thoracotomy. In these patients preoperative studies did not show conclusive evidence of inoperability. There were thirteen patients in this group and all underwent exploratory thoracotomy. In every instance it was found that due to local extension, the disease was technically inoperable. In 75% of these patients the primary lesion as measured by X ray or on postmortem study was larger than 5 cm. in diameter. There was no operative mortality in these patients. Two cases developed atelectasis and one empyema which responded to conservative treatment. Eleven patients received nitrogen mustard, deep X-ray therapy, or both. None of these patients is alive today. The average survival time was eight months. Sixty per cent of these patients were dead in less than six months. One patient survived twenty months after thoracotomy.

IV. Resectable. There were seventeen patients in this group who underwent resection by various members of the Thoracic-Surgical Department. The types of operations which were performed are as follows: pneumonectomy 11, radical pneumonectomy 2, and lobectomy 4. There were two operative deaths within a week after resection. One was due to pulmonary insufficiency and the other to a ruptured arteriosclerotic abdominal aneurysm. Pneumonectomy was considered the preferred operative procedure for all cell types except bronchiolar carcinoma. Lobectomy was performed in small peripheral lesions with no obvious gross hilar lymphnode involvement.

TABLE IX
Pneumonectomy Cases Still Alive

No. of Patients	*Survival Time Months*	*Pathology*	*Lymph Nodes*
1	11	Epidermoid	—
1	10	Adeno.	+
1	34	Epidermoid	+
1	48	Undifferentiated	+

Of the patients who underwent pneumonectomy after 1956, four are alive today with no obvious evidence of recurrence (Table IX). In the remaining seven pneumonectomy patients that survived the operation one patient died four years after thoracotomy from generalized metastases which it was thought had originated from carcinoma of the trachea. The remaining six patients all died from local recurrence or carcinomatosis from three months to five years after surgery. The average survival time was twenty-three months. (Table X). In the lobectomy group none is alive. Three died from three to seventeen months after surgery from recurrence of the disease. The fourth patient had a right lower lobectomy for carcinoma *in situ*, and died twenty-three months after surgery from myocardial infarction (Table XI).

Discussion

A review of the literature revealed uniformly discouraging results in bronchogenic carcinoma.[1,2,6,7,8] In spite of the small number of cases treated surgically in this hospital the results do not differ much from those in other reported series (Table XII). The majority of our cases were characterized by insidious onset, paucity of symptoms and rapid growth with early metastases especially in the undifferentiated and anaplastic tumors. Twenty-one per cent of the cases were inoperable at the time of their initial complaint. Only seventeen cases (20%) of the entire series were resectable. There was a high incidence (37%) of undifferentiated and anaplastic tumors characterized by their high degree of malignancy, invasive qualities, and poor prognosis. In our cases there was considerable delay in diagnosis and operation, especially in the well differentiated and epidermoid carcinoma group. Forty-five per cent of the patients had their symptoms for more than six months with an average duration of 4½ months. Although Husfeldt[9] reported that the incidence of resectability in cases of bronchogenic carcinoma was practically the same in both early and late cases we can assume that the end result and prognosis were not.

TABLE XII

Author	*No. of Cases*	*% Explored*	*% Resected*
Yashar	86	35	20
Kirklin	767	48	24
Ochsner	1170	52	33
Burford	1008	60	35
Overholt	733	62	37

The concept of "biological predeterminism" as suggested by MacDonald[10] and supported by Crile,[11] which is the expression of the biological potential established during the preclinical phase of neoplasia, explains the variegated pattern of behavior and prognosis, and establishes the selection of cases on a more logical basis. Blood vessel invasion by tumor which is a frequent occurrence in undifferentiated carcinoma accounts for the poor prognosis in many cases.[13]

It should be remembered that carcinoma of the lung has an insidious onset, yet is 100% fatal if allowed to go unrecognized or if treated by X ray or chemotherapy. None of the symptoms of this disease are pathognomic. Dr. Ochsner[12] once pointed out that presence of symptoms in cases of lung cancer is evidence of extension of tumor and makes the prognosis poor. Unnecessary delay in

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TABLE X
Pneumonectomy Cases Not Alive

No. of Patients	*Pathology*	*Lymph Nodes*	*Survival Time Months*	*Cause of Death*
1	Undifferentiated	—	60	local recurrence
1	Undifferentiated	+	48	ca. trachea carcinomatosis
1	Epidermoid	—	23	carcinomatosis
1	Undifferentiated	+	16	local recurrence
2	Epidermoid	+	7	carcinomatosis
1	Oat Cell	+	3	carcinomatosis

TABLE XI
Lobectomy Cases Not Alive

No. of Patients	*Pathology*	*Lymph Nodes*	*Survival Time Months*	*Cause of Death*
1	Carcinoma *in situ*	—	21	Myocardial infarct
1	Epidermoid	—	17	Local recurrence
1	Epidermoid	+	8	Carcinomatosis
1	Adeno ca.	+	3	Local recurrence

arriving at an accurate diagnosis because of a lack of characteristic clinical manifestations or symptoms may cause the patient to lose his only opportunity for ultimate cure. The admonition of Overholt should be followed that if cancer potential in a given case is more than 1%, exploratory thoracotomy is indicated. The risk of such a procedure in experienced hands is less than 1%.[14] Cancer of the lung may present itself with such variable symptoms as changes in the character of a cough, hemoptysis, weight loss, or unresolved pneumonia. Forty per cent of cases of unresolved pneumonia in older patients prove to be due to bronchogenic carcinoma.[16] Fifteen per cent of our patients had symptoms diagnosed as unresolved pneumonia before a definite diagnosis of carcinoma was established. Bronchoscopy, bronchial washings, and scalene node biopsy are of great help, not only in establishing the diagnosis, but in showing extension of the disease. Once the diagnosis is made, the treatment is based on the concept of biological predeterminism. Selection of the operative procedure depends on the cell type, location, size, and extent of the tumor. Pneumonectomy as a curative procedure is considered the operation of choice for all cell types except bronchiolar carcinoma. Lobectomy may be indicated in a small peripheral lesion with no obvious hilar lymphnode involvement, or as a palliative procedure in those patients with poor pulmonary and cardiac reserve.

SUMMARY

1. A statistical study and follow-up of 86 proven cases of bronchogenic carcinoma observed between January 1, 1950 to December 31, 1959 is presented.

2. Symptoms, age, sex distribution, bronchoscopic findings, and cell types are discussed.

3. Surgical exploration was carried out in thirty patients (35% of cases). In fifteen patients (20%) resection of the tumor was possible by pneumonectomy or lobectomy.

4. Early pulmonary resection, although leaving much to be desired, provides the best chance of cure in bronchogenic carcinoma.

Acknowledgment

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References

[1]Gibbon, J. H.; Allbritten, F. F.; Templeton, J. Y., and Nealon, T. F.: Cancer of the Lung — An Analysis of 532 Consecutive Cases, Ann. Surg. 138:489, 1953

[2]Ochsner, A.; Ray, C. J., and Acree, P. W.: Cancer of the Lung, Am. Rev. Tuberc. 70:763, 1954

[3]Rienhoff, W. F., Jr.: A Clinical Analysis and Follow-Up Study of Five Hundred and Two Cases of Carcinoma of the Lung, Dis. Chest 17:33, 1950

[4]Daniels, A. C.: Methods of Biopsy Useful in Diagnosing Certain Intrathoracic Diseases, Dis. of Chest 16:360, 1949

[5]Harken, D. E.; Black, H.; Clauss, R., and Farrand, R. E.: A Simple Cervicomediastinal Exploration for Tissue Diagnosis of Intrathoracic Disease, New England J.M. 251:1041, 1954

[6]Kirklin, J. W.; McDonald, J. R.; Dagett, O. T.; Moersch, H. J., and Gage, R. P.: Bronchogenic Carcinoma: Cell Type and Other Factors Relating to Prognosis, Surg., Gynec. & Obst. 100:429, 1955

[7]Overholt, R. H., and Bougas, J. A.: Fifty-One Cases of Lung Cancer With Five-Year Survival, J.A.M.A. 161-961, 1956

[8]Burford, T. H.; Center, S.; Ferguson, T. B., and Spyat, H. J.: Results in the Treatment of Bronchogenic Carcinoma, J. Thoracic Surg. 36:316, 1958

[9]Husfeldt, E.: Carcinoma of the Lung, Johan Holst Memorial Volume, University of Oslo, Norway, p. 119, 1955

[10]McDonald, I. G.: Biological Predeterminism in Human Cancer, Surg. Gynec. & Obst., 92:443, 1951

[11]Crile, G., Jr.: Factors Influencing the Spread of Cancer, Surg., Gynec. & Obst., 103:342, 1956

[12]Ochsner, A.; DeCamp, P. T., and Ray C. J.: Bronchogenic Carcinoma With Emphasis on Early Diagnosis, Geriatrics 9:15, 1959

[13]Collier, F. C. D.; Blakemore, W. S.; Kyle, R. H.; Interline, H. T.; Kirby, C. K., and Johnson, J.: Carcinoma of the Lung: Factors Which Influence Five-Year Survival With Special References in Blood Vessel Invasion, Ann. Surg. 146:417, 1957

[14]Overholt, R. H., and Bogas, J. A.: Detection, Selection and Resection in Pulmonary Carcinoma, Am. J. of Surg. 89:475, 1955

[15]Nash, A. D., and Stout, A. P.: Giant Cell Carcinoma of the Lung, Cancer 11:369, 1958

[16]Yashar, J. J.: Unpublished data

DOCTOR JOHN E. DONLEY

Although Rhode Island is the smallest state in the union, its medical journal is one of our favorite exchanges. It has consistently maintained a high standard of original articles and of editorial content. Doctor Donley was a worthy successor to the brilliant and lovable Peter Pineo Chase, who died in harness, April 23, 1956. Now Doctor Goldowsky has a large pair of editorial shoes to fill — but no doubt will keep the RHODE ISLAND MEDICAL JOURNAL on the same high level as his predecessors. He does not come as a novice, since for many years he has been an associate editor.

The NORTH CAROLINA MEDICAL JOURNAL extends to the Rhode Island Medical Society sympathy in the loss of Doctor Donley, and congratulations on having a capable successor in Doctor Goldowsky.

... Reprinted from the editorial pages of the NORTH CAROLINA MEDICAL JOURNAL, November, 1960.

150th ANNUAL MEETING

Rhode Island Medical Society

MAY 2 and 3, 1961

Masters in Medicine . . .

LEONARDO AND VESALIUS

The Two Roads: Surgery and Science *

FRANCIS D. MOORE, M.D.

Moseley Professor of Surgery, Harvard Medical School; Surgeon-in-Chief, Peter Bent Brigham Hospital

Dr. Moore talks softly and carries a big moral at the conclusion of this historical and artistic essay. We liked it, even without the moral. This shortened version is taken from the book, *Disease and the Advancement of Basic Science,* edited by Dr. Henry K. Beecher, published last summer by the Harvard University Press.

ALTHOUGH we live in a period when it is appropriate to foster fundamental science and somewhat old-fashioned to defend applied science, I should like to emphasize that very important and elegant work of applied human biology, the study and practice of medicine. It is my contention that the general atmosphere surrounding the care of the sick has always been one of the chief factors in the advancement of biological science. This atmosphere is one of urgency, a stronger motivation than any other community drive except national defense, a promise of possible help in the relief of suffering. The careers of two men of the Renaissance test, if not prove, my contention that the care of the sick has provided a most fertile milieu for the advancement of science. These two men are Leonardo da Vinci and Andreas Vesalius.

It has been said many times that Vesalius was the man who opened biological science as we know it now, by first looking at the human body just as an astronomer might look at a star or a botanist might inspect a tropical plant. He studied and drew human anatomy in a way that was entirely original and was most significant for the growth of biological science. Vesalius lived from 1514 to 1564 and he did his major work in Padua between 1535 and 1545.

It is therefore especially interesting to consider that the pictures by Leonardo shown on these pages were made fifty years before those of Vesalius. They are elegant anatomy, superb science, and surpassing art and yet they had no influence whatsoever on the growth of anatomy.

There is a striking contrast between the scientific impact of these two men, who worked in the same field within 100 miles and within fifty years of each other. Leonardo was born in 1452. He died in 1519, when Vesalius was five years old. Leonardo's early period of anatomical interest was between 1487 and 1490, during which time he became interested in anatomy and dissected a few arms and legs, and, due to local practice, heads; but he did not have much opportunity to carry out dissection of an entire cadaver until about 1510 in Florence.

In view of the remarkable importance of Vesalius, it is especially interesting now to look back at Leonardo and try to understand why he had no influence whatsoever on biological science or anatomy when much of his anatomical observation was just as accurate and penetrating as that of Vesalius and his scientific interest just as "pure."

It is a common misconception that Leonardo's anatomical study was undertaken so that he could become a better artist. Leonardo's anatomical study was approached with exactly the same thoroughness and enthusiasm with which he approached the many other things in which he was interested, including engineering, aviation, military science, and architecture. He went into the matter of the structure of man with his full inquiring vigor and went far deeper into anatomy than was necessary merely to draw the surface. He also developed ideas for anatomical study, dissection, and teaching — ideas which were entirely original with him and were actually quite lost, even to Vesalius, and not rediscovered for several hundred years. These were most especially the technique of the sagittal section, the coronal section, the cross-sectional anatomy, and the concept of depicting an anatomical part as it looked from many aspects rather than just as seen from the front. If one looks through the newly republished collections of Leonardo's anatomical studies, one finds in them in essence all of the qualities which gave Vesalius such a key position about fifty years later. Yet, as nearly as we know, Leonardo had little influence on anatomical or biological science. His influence on art, architecture and engineering were extensive, so that we cannot assign to Leonardo any inability to communicate.

Both Leonardo and Vesalius were eminent men in their own times, very vocal, very egotistical; they taught widely, both of them loved to write and to draw pictures. We can accuse neither of them

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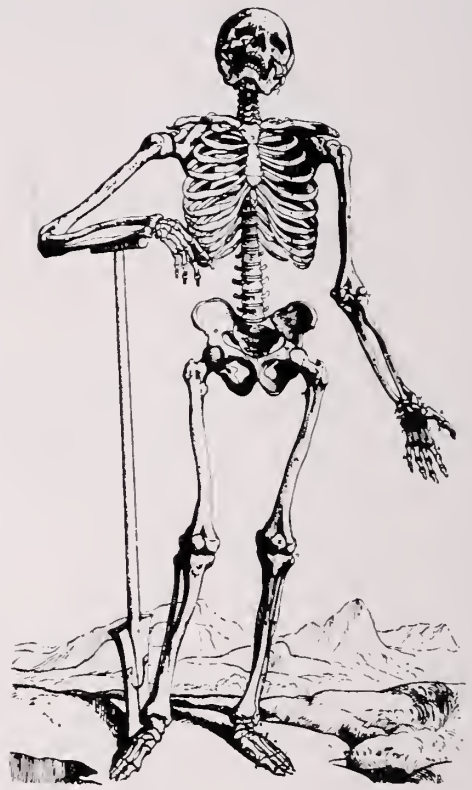
of having the slightest desire to hide his light under a bushel. But the fact of the matter is that Leonardo, who was isolated entirely from the environment of the care of the sick, had virtually no influence on the growth of biological science. He was not surrounded by others interested in becoming his pupils in anatomy or in seeking the application of anatomy to the care of the sick.

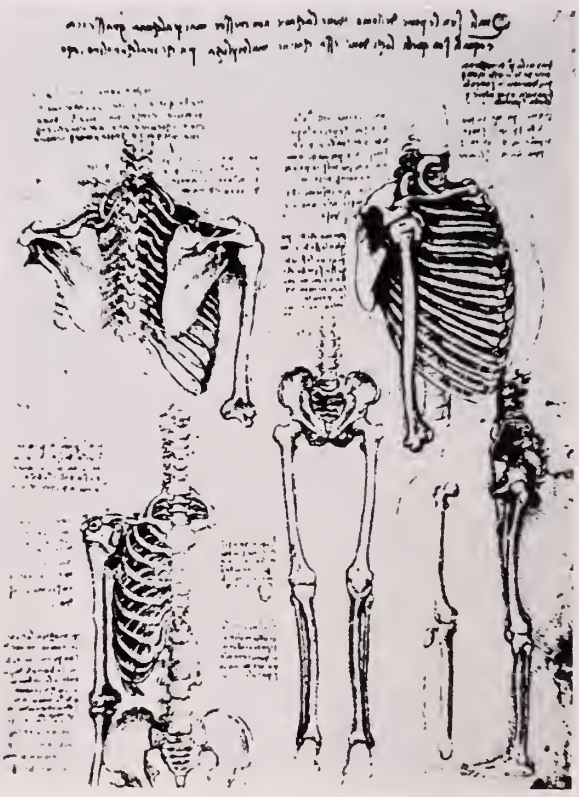
Vesalius, by contrast, worked with the sick and taught at a medical school. He was a professor of surgery and he was made professor at Padua at the age of 23. Vesalius' anatomical science was every bit as "pure" as the most abstract study of physics or chemistry might be today. There was no clinical application whatsoever for proper understanding of anatomical relations. Vesalius sought the truth as he could see it in terms of anatomy. But he was in a medical school, he was looking after the sick at the time, and he was surrounded by students. His influence was immediate, explosive, far-reaching, and indubitable. His chair at Padua saw successively Fabricius, Fallopius, and William Harvey. His work was plagiarized all over Europe, even before he died, and within one hundred years of his death academic dogmatism had run full circle, accusing him or copying him, usually a sign of success.

Jacob Bronowski, the author of *Science and Human Values*, points out that the two great periods of scientific birth, in Greece and in the Renaissance, were periods when science and art existed side by side, both of them in a very florid form, and that it was more than a coincidence that within twelve years in England were published the Authorized Version of the Bible, the First Folio of Shakespeare, and the first table of logarithms. Bronowski is also interested in the sort of individual who becomes creative in science. He says "a man becomes creative, whether he is an artist or a scientist, when he finds new unity in the variety of nature. He does so by finding a likeness between things which were not thought alike before and this gives him a sense both of richness and of understanding."

There certainly have been very few physicians or surgeons who could answer this description, especially when we think that in Bronowski's lexicon there are only about thirty men since 1450 who would be considered as fulfilling this definition. Both Leonardo and Vesalius qualify.

We thus find that within fifty years there were two men working close together in the same country and with the same kind of material, opening up observational science and biology by depicting accurately the structures of the human body as based on actual dissection. One of them, whose work was in association with the care of the sick and with students of medicine, had a tremendous





The skeleton: Leonardo (below), Vesalius (above). Leonardo avoids the dramatic poses used by Kalckar and Vesalius, and also by DaCarpi who may have set the style.



The superficial muscles: Leonardo (above), Vesalius (below). Leonardo's figure has a sturdy stance and sense of weight-bearing. The Vesalius, again, is a dramatic pose against the famous landscape background that was later identified outside Padua.



influence on the growth of science, and the other, who was isolated from this environment, did not. This duality epitomizes a main contribution of the care of the sick to the growth of biological science which has become the largest, most heavily populated and heavily communicated branch of all science and the one wherein advance can most readily find expression in terms of human welfare, undeniably an objective of even the most abstract scientist.

The two roads, surgery and science, have surely not always been together but in 1543 they were in one man. Despite this glorious conjunction, however, the two roads of surgery and science wandered quite separately for about 300 years, as biological science developed successively the fields of chemistry, physiology, pathology, biochemistry, metabolism, and biophysics, and surgery floundered in a morass of empiricism. The two roads converged again in 1850, and formed a union to which all of the advance in surgery in the last fifty years may be traced. The problem today is that of maintaining this unity and this growth. It is my conviction that this can best be accomplished by fostering the support of individuals who combine both talents in one career.

There are several serious problems which, if unsolved, are going to arrest the spectacular development of American surgery. These problems have to do with the career arrangements of those men who are talented in both fields. The practice of medicine or surgery is a time-consuming profession. The young surgeon who is forced to support himself cannot hope to find the time necessary to remain productive in clinical investigation. As he grows older he has an increasing tendency to retire from the attempt and to employ other individuals, now referred to as "basic scientists." Maybe this works somewhere, somehow, but I think in general it is an unfortunate trend. If this practice becomes widespread, the present healthy growth of surgical science is going to slow down and stop. That growth has been due to the willingness of single individuals to take the gamble and the sacrifice of a double career in science and surgery. But we should not require of these men too expensive a sacrifice.

The idea of leaving the young clinical investigator alone to do his work and giving him adequate support has been lost sight of completely. The so-called "pure" scientist can find support from many sources and is often paradoxically free of academic interruption, especially if he works in a hospital. It is the young man who wants to follow both roads together, clinical study and laboratory science, who must be freed and supported. It is because of him, not because of the career laboratory scientist, that we must go back to the simple concept of the full-time system, now essentially abandoned, for the

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support of the talented young surgeon.

The disturbing fact that we are drifting by small degrees away from the full-time system, so elaborately constructed about fifty years ago, is largely due to shrinking university endowments and sorely pressed hospital funds which will not permit the most important people in the younger age group to enjoy the freedom of full-time devotion to clinical investigation. A man in the first ten years out of his residency, with a wife and from two to six children, has to have support if he is to be free to study. Most departments have tried to seek out a solution through national grants, but even these, with few exceptions, are very limited as a source of continuing personal support. As a result, many young doctors find it to their economic advantage either to do nothing but research, in which case they retire to the laboratory, or to pursue entirely clinical practice, in which case they do well financially but their value to the advance of surgery is lost.

The need to follow the two roads at once not only applies to the individual but also to the balance within the hospital staff. While the laboratory is at the heart of the advance of modern medicine, under no circumstance should it be permitted to take control. The teaching hospital, to be a place of good investigation in the hundred years to come, must seek first and foremost to maintain its status as a place for the good care of the patient.

Our task today is to foster the careers of people who are talented and willing to contribute by keeping surgery and science close together. For this to be possible we have to go back to the fundamentals of modern academic life and re-explore the meaning of the full-time system. Hospitals and medical schools have thus a remarkable opportunity and also a responsibility in seeing to it that young men of great talent are not distracted by the need for practice during the years in which they can make the greatest contributions both to science and to surgery. It is they who will keep the two roads well paved and well traveled in the future years.

The skull: Leonardo (below), and Vesalius (above). Leonardo uses both coronal and sagittal sections. His rendering of the cervical vertebrae is stylized, probably because his specimen had been decapitated.



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RHODE ISLAND MEDICAL SOCIETY

Editorials

CHEMICAL AND GENERIC vs. TRADE NAMES

Is the state wasting money because its doctors prescribe drugs by brand names, rather than generic or chemical names?

The press has recently spotlighted the problem with a headline: *Rhode Island looks into drug costs for welfare cases.* "The state," so runs the feature article, "is seeking advice from the Federal Food and Drug Administration as to whether or not it should ask doctors to prescribe some drugs for relief patients by generic name or chemical name, instead of the usually much more expensive brand name."

The decision to seek advice from the FDA came about through the efforts of Rhode Island health committees meeting to discuss their mutual problems. Committees of the Rhode Island Medical Society, the Rhode Island Pharmaceutical Association, and an Advisory Committee of the State Welfare Department exist to bring to the people of Rhode Island the best possible health care for the lowest possible cost. For instance, in September 1959, the State Welfare Department, after several meetings with these groups, issued an informative directive to the physicians and druggists in the state establishing policy for antibiotics, vitamins, hormones, tranquilizers and appetite depressant drugs.

In October, 1960, the State Welfare Department met with the Advisory Committee on Social Welfare of the Rhode Island Medical Society. The Welfare Department presented for consideration a list of ten drugs with prices varying among a number of companies. The addresses of the companies offering lower prices were unknown to either the Welfare group or to the Advisory Committee. Because of the lack of basic knowledge of the companies involved, the welfare group was instructed to write to the FDA Commissioner in Washington to seek guidance. Specific information was sought concerning production and marketing facilities of each of the companies quoted as to whether or not the drugs listed met FDA standards, and especially as to whether the quality, potency, and therapeutic efficacy was as claimed. It was this incident which caught the interest of the press.

The problem is also of top interest to the physicians and druggists of Rhode Island. It is not as simple as the Kefauver report would have the laity believe. Some homework needs to be done on the situation. Anonymity of drugs holds great dangers for the American people.

Most drugs used in medicine have three names. First is the chemical name, usually very complicated, hard to understand by anyone but chemists. Because of this difficulty, the use of generic names was introduced, often derived from the chemical name, but easier to remember, pronounce, and write. Finally, there is the trade-mark name designating one particular manufacturer's exclusive brand of the drug in question.

Many drugs are now being offered to physicians by mail by unfamiliar companies, at lower prices than are asked for such drugs when they are made by ethical manufacturers and sold through prescription pharmacies. These cheap products have no brand insigne on them, a guarantee that the manufacturer is willing to acknowledge his product, to stand behind it, and to be responsible for its claims.

Drugs are a physician's tools. They should be of the best materials, but not necessarily of the cheapest. The physician has to depend on the integrity of the drug manufacturer to assure that his drug is of high quality and that it is of the same quality which has given satisfaction in the past. Few physicians are willing to prescribe drugs simply because they are cheap; they believe that welfare patients should have medical care equal in quality to that received by other patients. If they are sure that a non-brand name drug can meet the test of quality and efficacy, they would have no hesitation in prescribing it.

But how is the physician, without the necessary time or facilities, to investigate claims that so-

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called generic equivalents are really equivalent. His experience has shown him that such preparations are often short-dated and sometimes outdated. He needs to know if the drug manufacturer is reliable. Does he insist on drug quality and exactness of ingredients? How does the therapeutic efficacy of the drug which he sells compare with that of the ethical manufacturer from whom he has copied it and who has perhaps spent millions of dollars in its research and development?

In a recent survey, two products of an unfamiliar company were bought on prescription by generic name from various pharmacies in several cities. When analyzed, the active ingredient content of these so-called generic equivalents fell outside U.S.P. limits in 35% of the cases, while a similar quantity of branded drugs bought at the same time yielded in all cases precisely the amount of the active ingredient which was listed on the label. This is no isolated case. One antibiotic was found to be 50% more effective than a supposed equivalent with a different filler. The therapeutic value of a drug depends upon how much of it is absorbed and how rapidly or slowly, giving great importance to such factors as tablet coating and filler. Variations can be extreme among drugs; and, as the drug becomes more complex, possibilities for differences multiply.

Allowing the substitution of less costly "equivalents" or "generics" for specific brand-name drugs prescribed by a physician for a welfare patient shifts the responsibility for the well-being of the patient from the doctor to the druggist. This practice is dangerous for the patient; it is questionable legally. Druggists do not condone it, and it is not good for the doctor who must hold himself rigidly to his ethical standards.

No physician should be required, as is sometimes the custom, to provide a statement certifying the need for a drug. If it were not necessary, he would not have prescribed it. The one best qualified to make this decision is the attending physician. Should a physician misuse this prerogative, there is the regular machinery for handling such complaints within the profession: the Grievance Committee of the Rhode Island Medical Society. It is hardly necessary to introduce a dangerous and questionable custom which is very likely to boomerang.

What about cash savings? The Division of Public Assistance examined 10,000 drug prescriptions for welfare recipients for the purpose of determining the actual savings to the department of "generic" *versus* "trade-name" drugs. The drugs had cost $28,000. Substituting generic drugs whenever possible would have provided a saving of less than 5% ($1,400). Syracuse has made a similar study in drug costs with comparable results. Even though a small saving might accrue to the state if the prescribing of drugs by their generic names should become established, in the final analysis a drug program should not be designed solely to induce economy. It must also assure that quality medical care is being given.

Continued co-operation of the Advisory Committees of the Rhode Island Medical Society with the State Welfare Department is desirable to promote discussion of welfare medical care programs, and to find solutions for the drug and other problems. Periodic evaluation of the drug program from a medical, administrative, and financial point of view should be carried out. An educational program is desirable, directed to personnel of the state and local welfare offices and to recipients, for the purpose of distributing complete and accurate information about the health care program, and of obtaining co-operation in eliminating abuses as well as extravagant and unnecessary practices.

THE PHYSICIAN'S RESPONSIBILITY TO THE HARD OF HEARING

When a person becomes hard of hearing he needs firm guidance by his doctor; he is otherwise bewildered and tends to take advice from various friends who have conflicting ideas.

First and foremost he should see an otologist. The condition may be helped by treatment. If this is not possible the otologist is the one to advise him as to what he should do.

If a hearing aid is advised, he should get one promptly. The otologist should advise him where to go and what kind of aids to try. The best hearing aid is the one that helps the hearing most. Extra expense for making the aid inconspicuous is usually wasteful, and sometimes makes the aid less efficient.

Most people find the hearing aid helpful, but some are not sufficiently helped to allow them to function efficiently and comfortably. These people should take lip reading lessons. It is extraordinary the benefit one can get from a hearing aid and lip reading study combined.

All this advice, tailored to meet the individual need, is given by the otologist. Hearing aids can be bought from the hearing aid dealers. Lip reading teachers are available. Those who want further help in the details of hearing aid evaluation and lip reading study should visit the Providence League for the Hard of Hearing.

Some hospitals are developing hearing centers

where highly expert examinations and advice are available. The state department of Social Welfare is financing the care of those getting state aid. However, the guidance of the hard of hearing people is still the responsibility of the medical profession.

THE CHARLES V. CHAPIN HOSPITAL

This hospital, where the epoch-making studies of Doctor Chapin were put to practical use in the care of contagious disease and the value of medical asepsis was clearly demonstrated, continues to be a most valuable institution despite the fact that modern medical advance, particularly the use of antibiotics and chemotherapy, has greatly reduced the number of patients with bacterial disease who are sent to it. Poliomyelitis, encephalitis and other conditions of virus, rickettsial or other origin still need the expert diagnosis and treatment that has been characteristic of the work in this hospital, and we must still admit that bacterial infections are by no means entirely defeated.

Doctor Dennett L. Richardson, its first superintendent, not only put the ideas of Doctor Chapin to practical use and developed techniques that were models for contagious disease hospitals everywhere, but also, by precept and especially by example, trained a group of experts whose work, meticulously carried out in every detail, was of the highest type. Among these, the famous team of Gregory, West and Bell could probably not be exceeded in downright skill and efficiency anywhere in the country. Harmon B. P. Jordan, Raymond E. Stevens, and many other well-known physicians were also among those who trained at this hospital, and went on to other fields. A member of this group, Doctor Hilary Connor, is particularly to be congratulated at this time, as he retires from his post as superintendent in which, in carrying on the work so ably begun by Doctor Richardson, he has made an excellent record. And in offering its felicitations to him the Journal also extends them to his successor, Doctor Edward J. West, a member of the triumvirate mentioned above. We are proud of the record of this hospital and happy that its future is in such capable hands.

STRAWS IN THE WIND

Several recent court opinions appear to give reason to hope that the tide of malpractice suits may have begun to ebb. In a recent decision a California court sharply limited the extent to which laymen will be permitted to judge strictly medical testimony. The court in this case refused to permit a jury to judge a suit based entirely on X-ray findings. Claiming that the doctrine of *Res Ipsa Loquitur* must be applied, the plaintiff's attorneys argued that X rays of a fractured leg indicated such gross negligence in the setting of a fracture, that expert testimony would not be necessary. The court ruled that a layman, depending on common knowledge and without expert testimony, was not qualified to judge the result, however unfortunate it might be. It dismissed the case for lack of expert testimony and was affirmed by the District Court of Appeals. Coming as it does from the home grounds of *Res Ipsa Loquitur* this is an encouraging development indeed.

Other developments are significant. The New York State Supreme Court has now ruled that "the weight of medical authority does not necessarily depend upon the number of doctors who agree to a certain method." This ruling was handed down in a suit against the State of New York involving a patient who was permanently paralyzed following an intraspinal injection of tetanus antitoxin given in accordance with directions issued by the Department of Health. The Court ruled that the result "must be attributed to the misfortunes of life" and that "there is no authority that a doctor . . . must use what some doctors consider the best method if a method which is accepted by respectable medical authority is adopted." This represents further progress in New York State where the climate has already been greatly improved by the utilization of impartial medical testimony under the jurisdiction of the court.

There is good evidence that the trend of malpractice litigation in California which was straight up from 1945 until 1957, leveled off in that year, and that in 1959 there was actually a slight falling-off in both suits and claims. It was felt that in the most litigation minded of states this was due to the educational efforts of the California Medical Society in informing the public that poor results do not of necessity imply negligence, and in setting up machinery to evaluate complaints. This latter device has long been in operation in Rhode Island.

These are indeed encouraging signs, and we certainly hope that they are straws in the wind.

THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS*

ALEX M. BURGESS, SR., M.D., F.A.C.P.

The Author, *Alex M. Burgess, Sr., M.D., F.A.C.P., of Providence, Rhode Island. Member of the Joint Commission on Accreditation of Hospitals, 1952 — .*

IT IS A PRIVILEGE to discuss the subject of *our* Joint Commission on Accreditation of Hospitals. I say *our* advisedly, yours and mine, for your American Hospital Association and the American College of Physicians of which I am a fellow are two of the four constituent members of the Corporation of this organization. You remember, I am sure, that for years, beginning in 1919, the American College of Surgeons alone and on its own initiative carried on the much needed function of examining and accrediting hospitals, which was formally turned over to the Joint Commission in December, 1952. Three of the present commissioners, Doctor Julian P. Price and Doctor Stanley R. Truman and I have served on the Commission since that date. The first executive director was Doctor Edwin L. Crosby, now executive director of the American Hospital Association and the second and present incumbent is Doctor Kenneth B. Babcock. As I am sure you know, both of these men have had years of experience as hospital administrators and, I may add, it would be difficult if not impossible to find two individuals better qualified to fill this important position.

Besides the two members of the corporation which I have mentioned there are, as you know two more, the American Medical Association and the American College of Surgeons. The policies of the Commission are determined by a Board of Commissioners of which the American Hospital Association and the American Medical Association furnish seven each, and the College of Surgeons and the College of Physicians three each. The funds to carry on the work of the commission including the salaries of the group of physicians who conduct the actual surveys of hospitals are furnished by the four constituent member organizations in proportion to their representation on the Commission. In the case of the American Medical Association and College of Physicians, the surveyors which they support give their full time to the work of the Commission while those employed by the American Hospital Association and College of Surgeons combine their surveys for the commission with other duties and, therefore, there have to be more of them to make the division of the support by the members of the commission an equable one.

With this background information you are doubtless familiar and also with the fact that the Joint Commission is a voluntary organization which, on receiving a written invitation, will survey any hospital listed as such by the American Hospital Association without cost, if it has at least twenty-five adult beds and has been in operation for at least twelve months. The reports of the surveyors are received by the director who has the power to alter the recommendation of the surveyor if he sees fit to do so. A report of all surveys made each month goes to every commissioner with a detailed statement of the reasons for anything less than full three-year accreditation in the case of every hospital which receives such a low rating. As you are aware, accreditation for one year only constitutes a warning that all in a hospital is not well, but does not take away the accreditation, which can be again awarded on a three-year basis if a subsequent survey shows that deficiencies have been corrected.

The Standards for Accreditation, adopted by the Board of Commissioners, are embodied in a document which has been revised and, we hope, improved, from time to time. They "have evolved from years of experience in observation of those hospital practices which have proved consistent with high quality *patient care*." (From the introduction to the New Standards which have just been adopted.) Patient care is the watchword, and it is with patient care and nothing else that the Joint Commission is concerned. Many things, the physical plant, the organization of the staff and the activities of committees for example, all have a direct bearing on patient care. Although educational programs and research in a hospital are also in the broad sense related to the care of patients, these are functions with which the Joint Commission does not deal.

*A report given at a meeting of the American College of Hospital Administrators, at Philadelphia, Pennsylvania, October 13, 1960.

The new standards, of which you will receive a copy, consist of a one-page statement of *Basic Principles* and then *Standards of Procedure* which in its typewritten form occupies twelve pages. The staff of the Commission will prepare for the commissioners a detailed statement of all changes that have been made in the previous standards, but this is not yet available and this you yourselves can easily do, if you so desire, when you receive your copies, as you will in the very near future. The new document is the result of the work of the Committee on Standards which has labored long and hard, weighing every word and phrase and carefully discussing the possible variations in interpretation that may be made. It has subsequently been checked by the whole commission with but few minor alterations resulting, and then adopted.

With the new Standards you will also receive what is, we believe, another and important document prepared by Doctor Babcock and his excellent staff. Although this has, as yet, been given no title it is in fact an elaboration, explanation and interpretation of the standards and should prove to be of great value. It is quite impossible for even the legal profession to prepare statements that cannot be interpreted in more than one way. In the case of these new standards, these explanatory statements make clear, as far as is humanly possible, what the Board means by what it says in the Standards. They also elaborate on the simple statements of the Standards and make clear how they should be applied. All the Commissioners have studied this document and have suggested a few minor alterations. It has then been officially adopted.

Examples may interest you. In the standards it is noted that "the hospital shall provide . . . a sanitary environment to avoid sources and transmission of infections." The new document devotes three pages to methods suggested to accomplish this. These are suggestions, not requirements, but certainly measures such as those described are necessary to accomplish the objective. The establishment of a staff committee on infections, for example, is recommended, an action which has been previously suggested by the commission and has been pretty generally adopted by good hospitals, as would certainly have been the case whether or not the Commission had recommended it. This leads me to say that most of the standards of procedure and excellent ways to carry them out would be adopted anyway by almost all good hospitals, but protection of the public demands that definite requirements be stated so that the rather rare hospital whose authorities would not otherwise keep its practices up to standard will be forced, if it wishes to maintain its accreditation, to mend its ways. It would be a good thing too, as I think we would all agree, if it were possible in a similar way to coerce the small minority of physicians whose work is substandard into mending their ways. Though this can and should be done in hospitals, one cannot easily imagine how it could be accomplished in private practice in offices and patient's homes.

Control of Quality of Patient Care

This leads directly to a consideration of control of the quality of patient care in the hospitals. This has been carefully considered by the Commission. Two methods, the Medical Care Appraisal Plan of the American College of Physicians[1] and the Medical Audit Program of the Commission on Professional and Hospital Activities have been discussed, but the Joint Commission is not willing to indicate that any specific method should be adopted. It will recommend that hospitals employ some procedure such as these that I have mentioned, to accomplish the objective.

This is in line with the thinking of the Commission. Although it has been accused of great rigidity in its insistence on its requirements, this is, I believe, not true and is chiefly the result of the necessity to give the surveyors definite checks to be made in all appropriate phases of hospital work that bear on patient care. Actually the Commission is interested in the objectives to be attained and not in the exact method by which this is accomplished. Whatever results in high quality care of patients is good and the exact details of the method by which this is brought about are not important. For example, in one hospital with which I am acquainted the quality of patient care on the medical service is determined by constant surveillance by the Chief of the service who, at a definite risk to his popularity and with a great expenditure of time and effort, personally checks the records of service and private patients and makes it his business to know how these patients are being treated. He is an efficient committee of one and he does the job.

It may occur to you that the percentage of autopsies performed in a hospital is primarily related to education rather than to the care of patients. While this is perhaps true, the Joint Commission takes the attitude that the review of clinical work and the experience thus gained at the autopsy table constitute an important part of the "Analysis, Review and Evaluation of Clinical Practice" which is a must in the continuance of good treatment of patients. "Autopsies, as a means of staff education and improvement of clinical knowledge rank extremely high in the minds of the Commissioners." They believe that non-teaching hospitals should have at least a 20 per cent autopsy rate and teach-

[1]Annals of Internal Medicine 517 :821 October 1959

continued on next page

ing hospitals at least a 25 per cent rate." (This is, I believe, very low.) I would like to mention also that the Council on Medical Education and hospitals of the American Medical Association and its Internship and Residency Review Committees do demand a considerably higher autopsy percentage than does the Joint Commission. Incidentally, I may add, there should be no such thing as a "non-teaching" hospital. What is meant here is a non-university-affiliated hospital. I believe we will all agree that all hospitals should be "teaching" in the strict sense and all should have educational programs of greater or less magnitude to suit their needs.

The Commission has been roundly and at times rightly criticized for some of its requirements and has always given such criticisms careful attention. The requirement for consultations, for example, as originally received from the College of Surgeons, was bitterly criticized, then carefully revised and now appears to be satisfactory to all concerned. The same is true of the requirement of attendance at staff meetings, the determination of which has been returned to the hospitals to be incorporated in their bylaws.

A comparison of the newly adopted "Standards" with those dated October 1, 1957 shows a few important changes and many instances of rewording to improve the clarity, simplicity and clear arrangement of the text. One of the most important of the changes from the point of view of hospital staffs is the deletion of all requirements of attendance at staff meetings as has been mentioned. Responsibility for adequate meetings, minutes and staff attendance has been placed in the hands of the individual hospitals. "Attendance requirements for all medical staff meetings shall be determined by the active staff." This is quoted directly from the new standards. The different methods of fulfilling the requirement that adequate meetings shall be held have been rewritten and clarified, and certainly do not ask any hospital staff to do more than it normally would in carrying out its responsibilities. It is to be noted, however, that adequate minutes of all meetings are required. This is the phase in which many hospitals are deficient, but, I think we all agree, should be meticulously done, for in this matter as in all types of medical and scientific work the old saying is still true "Observations unrecorded are lost."

Review of Monthly Reports

You may be interested in the type of monthly report received by every member of the Board of Commissioners. I shall show parts of a typical report. These each commissioner goes over with care and then, if he approves, he signs an approval slip and mails it back to Doctor Babcock's office. When all approvals have reached the office the action of the commission becomes official.

As you have all received many communications from the Commission, I am sure that a detailed explanation is not needed. You know, for example, that besides pointing out major deficiencies that may cause a change in the status of a hospital's accreditation, it is the rule that minor deficiencies which the surveyor observes and suggestions for improvement are sent to every hospital surveyed. It would, I suppose, be impossible for a hospital, with all the details of its equipment and operation, and the many activities of its staff, to be so perfect that a keen surveyor could find nothing which could be made any better. The suggestions that result from the surveys, like the surveys them-

JOINT COMMISSION ON ACCREDITATION OF HOSPITALS
200 East Ohio Street, Chicago 11, Illinois
Summary of Recommendations for Accreditation
May 1, 1960 — May 31, 1960

	Total	*Three-Year Accreditation*	*One-Year Accreditation*	*No Accreditation*
Total	152	119	29	4
Initial Survey	4		2	2
No Change in Status	107	101	6	
Upward	22	18	4	
Downward	19		17	2

UPWARD		DOWNWARD	
One year to three year	16	Three year to one year	17
NA to three year	2	Three year to NA	1
NA to one year	4	One year to NA	1

FIGURE 1

This is a general summary of one month's work showing the over-all results of the surveys.

Surveyor: , M.D.

Member Organization: J.C.A.H.

		Previous Survey		*Present Survey Recommendations*		
	Beds	*Date*	*Result*	*Date*	*Surveyor*	*Final*
	80	'57	3 yr.	7-28-60	3 yr.	3 yr.
4	214	'57	3 yr.	7-29-60	1 yr.	1 yr.
	329	'57	3 yr.	8- 1-60	3 yr.	3 yr.
	460	'57	3 yr.	8- 2-60	3 yr.	3 yr.
	380	'57	3 yr.	8- 4-60	3 yr.	3 yr.
	102	'58	3 yr.	8- 8-60	3 yr.	3 yr.
3	417	'59	1 yr.	8- 9-60	1 yr.	NA
1	52	'55	NA	8-11-60	NA	NA
2	34		Init.	8-12-60	NA	NA
	51	'59	1 yr.	8-17-60	3 yr.	3 yr.
	109	'57	3 yr.	8-18-60	3 yr.	3 yr.
	145	'57	3 yr.	8-19-60	3 yr.	3 yr.

1. Hospital — NA
Little staff organization.
Clinical review not recorded.
Incomplete medical records.
Obstetrics not segregated.

2. Community Hospital — NA
Little staff organization.
Poor medical records.
Low autopsy rate.

3. Hospital — NA
Overcrowding.
Understaffed.
Psychiatric hospital apparently for domiciliary care.

4. Hospital — 1 year
No clinical review for past seven months.
Old portion of physical plant inadequate.

FIGURE 2

The results of the monthly surveys by one surveyor. The reasons for the less than three-year approval for four hospitals are noted in lower half of figure.

selves, are of course intended to help hospitals improve the care of their patients. It is understandable, too, as I am sure we all can recognize, that an outside agency coming in and pointing out a deficiency, can stimulate action that otherwise would not be taken, despite the efforts of the administrator or chief of staff to shake the group out of its lethargy and bring this about.

Let me, then, show you parts of a typical monthly report that we have received and that indicate the reasons for the down-grading of certain of the hospitals involved. Of course the names of the hospitals have been deleted as the information is confidential. You can see what some of the commoner deficiencies are. (Figures 1,2,3,4.)

I am sure that in many instances the improvements required by the Commission were well known to the administrators but that they had been unable to bring them about by persuading the trustees to spend the money perhaps, or the staff to spend the time and effort, as the case might be, to accomplish them.

What then, let us ask, has the Joint Commission accomplished by its years of continuous effort and at great expense? You can answer this question as well as I, but I shall attempt to do so. As a gen-

continued on next page

eral statement I believe we can say that it has helped, and occasionally perhaps coerced, hospitals into improving the care of their patients where such improvement could be demonstrated to be needed. Also, by giving full accreditation to hospitals where the care could be shown to be fully up to standard and no serious deficiencies could be found, it has been a means of certifying to the public that full confidence in the work of such hospitals is justified. And its work and criticisms have not been confined to the small community institutions. In the case of a few well-known university hospitals definite deficiencies have been pointed out and the adoption of a "holier than thou" attitude on their part has not prevented such hospitals from being down-graded. In some instances unpleasant publicity and severe criticism of the Commission has resulted, but, apparently this has been a matter of attempted face saving and in the case of more than one such hospital it has been privately admitted to the Commission that the criticism and the resulting action has been the best thing that could have happened to these hospitals. I have been told that a striking instance of this type of situation is to be included in a popular article on the Joint Commission which it is hoped will be published in a well-known magazine.

Surveyor: ....., **M.D.**

Member Organization: J.C.A.H.

		Previous Survey		*Present Survey Recommendations*		
	Beds	*Date*	*Result*	*Date*	*Surveyor*	*Final*
	225	'57	3 yr.	5- 2-60	3 yr.	3 yr.
1	2666	'57	3 yr.	5- 3-60	NA	NA
	147	'57	3 yr.	5- 6-60	3 yr.	3 yr.
4	244	'57	3 yr.	5- 9-60	1 yr.	1 yr.
	242	'57	3 yr.	5-10-60	3 yr.	3 yr.
2	130	'57	3 yr.	5-11-60	1 yr.	1 yr.
	100	'57	3 yr.	5-12-60	3 yr.	3 yr.
	136	'57	3 yr.	5-13-60	3 yr.	3 yr.
	107	'57	3 yr.	5-16-60	3 yr.	3 yr.
	91	'57	3 yr.	5-17-60	3 yr.	3 yr.
3	140	'57	3 yr.	5-18-60	1 yr.	1 yr.
	288	'57	3 yr.	5-19-60	3 yr.	3 yr.
	143	'57	3 yr.	5-20-60	3 yr.	3 yr.

..... State Hospital — NA
Former A.P.A. approval.
Overcrowding.
Under staffed (both physicians and nurses).
Poor medical records.
Low autopsy rate.

..... General Hospital — 1 year
Clinical review not documented.
Poor medical records.
Committees of staff inactive.

..... Hospital — 1 year
Very weak medical record with many delinquencies.
Poor medical staff supervision.

..... General Hospital — 1 year
Staff bylaws incomplete.
Poor medical records.
Clinical review not documented.

FIGURE 3

The results of the monthly surveys by one surveyor. The reasons for the less than three-year approval for four hospitals are noted in lower half of figure.

It is of course impossible to persuade angels to accept employment as surveyors for the Commission. Those that we can appoint are human and are trying to do a hard job in a creditable manner. As far as my own experience with them goes, I have found them capable, courteous and very diligent experts, and when they have come to any of the hospitals in which I am interested I have hoped that they would point out all the deficiencies that could be found. There have, I know, been instances in which a surveyor has been found deficient, either personally or professionally, and has been dropped. In obtaining and training surveyors, checking their reports, dealing with a large volume of correspondence concerning surveys, traveling about and speaking on the Commission's work, personally re-surveying a hospital in the rare instance of a really difficult situation, trying to carry out the policies of the commissioners and conducting their meetings and those of the Advisory Committee, and in many other matters, you can easily see that in the Chicago office a lot is going on. It is my own belief that the work of the Joint Commission as now constituted is carried on in all its phases by people of great integrity, high ideals, sympathetic understanding of hospital problems and rare good judgment. Its influence in promoting the health and welfare of American citizens is, in my opinion, very great.

..... Hospital — 1 year
Poor staff organization.
Poor medical records.
Few autopsies.

..... General Hospital — 1 year
Clinical review not documented.
No visiting pathologist.
Low autopsy rate.
Incomplete medical records.

..... Hospital — NA
Fire hazards.
Little staff organization.
No autopsies.
Incomplete medical records.

FIGURE 4
Reasons for down-grading of three other hospitals. Note listing of "fire hazards," a frequent cause of reduction of accreditation.

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SESQUICENTENNIAL YEAR . . . MAY, 1961-MAY, 1962
THE RHODE ISLAND MEDICAL SOCIETY

REPORT ON ACTIONS OF THE HOUSE OF DELEGATES AMERICAN MEDICAL ASSOCIATION FOURTEENTH CLINICAL MEETING NOVEMBER 28 – DECEMBER 1 WASHINGTON, D. C.

CHARLES J. ASHWORTH, *Delegate*

AN INCREASE IN DUES for all members of the American Medical Association, as recommended by the Board of Trustees, was one of the important items approved by the House of Delegates at the Washington meeting last month. It is ten years since a raise in dues has been asked, yet a significant expansion in the scope of activities has taken place during this period. The Board's original suggestion stipulated an increase of not less than $10.00 and not more than $25.00 effective January 1, 1962. The reference committee's report adopted by the House set the figure at $20.00, asking an increase of $10.00 January 1, 1962 and an additional $10.00 January 1, 1963.

These funds are to be used to inaugurate or expand a number of programs including:

1. Financial assistance to medical students.
2. Continuing education for practicing physicians.
3. Health advice to the lay public.
4. Medical research.
5. The expansion by the Communications Division of its program of faithfully portraying the image of the American Medical Association.

It is important, the House emphasized, that the Board of Trustees report recommending a dues increase be transmitted in essence to the grass roots level.

The reference committee or Insurance and Medical Service, upon which your delegate served considered particularly two important items, among many — Voluntary Health Insurance and Health Care for the Aged. The following substitute resolutions were finally adopted in place of three resolutions submitted, plus a Board of Trustees report:

"Whereas, It has been widely recognized that voluntary health insurance is the primary alternative to a compulsory governmental program; and

"Whereas, The public has shown its confidence in this voluntary system; and

"Whereas, Current social, political and economic developments compel a new and revitalized effort to make voluntary health insurance successful; and

"Whereas, the American Medical Association has consistently pledged itself to make available the highest type of medical care; therefore be it

"*Resolved*, that the House of Delegates direct the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association and the Blue Cross Association into maximum development of the voluntary, non-profit prepayment concept to provide health care for the American people; and be it further

"*Resolved*, that similar leadership be undertaken to co-ordinate the efforts of private insurance carriers through conferences with their national organizations; and be it further

"*Resolved*, That, where feasible, efforts be made to co-operate with representatives of other types of medical care plans, other professional groups, and representatives of industry, labor and the public at large."

In dealing with health care for the aged, the House simply reaffirmed the A.M.A.'s support of the Kerr-Mills bill, and its opposition to any legislation involving the use of the OASDI mechanism for medical aid to the aged. The delegates also urged all state and local medical societies to co-operate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

In connection with health care for the aged, the House suggested further experimentation in home care programs, homemaker services and visiting nurse services. The delegates also recommended an increased emphasis at all levels of medical education on the new challenges being presented to physicians in the health care of older persons.

The House agreed with a Board of Trustees report regarding Polio Vaccine which said:

"In view of the fact that oral polio vaccine will not be generally available in sufficient quantity in

concluded on page 50

"...extraordinarily effective diuretic..."[1]

Efficacy and expanding clinical use are making Naturetin the diuretic of choice in edema and hypertension. It maintains a favorable urinary sodium-potassium excretion ratio, retains a balanced electrolyte pattern, and causes a relatively small increase in the urinary pH.[2] More potent than other diuretics, Naturetin usually provides 18-hour diuretic action with just a single 5 mg. tablet per day — economical, once-a-day dosage for the patient. Naturetin c K — for added protection in those special conditions predisposing to hypokalemia and for patients on long-term therapy.

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References: 1. David, N. A.; Porter, G. A., and Gray, R. H.: Monographs on Therapy 5:60 (Feb.) 1960. 2. Ford, R. V.: Current Therap. Res. 2:92 (Mar.) 1960.

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A.M.A. DELEGATE'S REPORT

concluded from page 48

1961 for any large scale immunizing effort, the Board of Trustees of the A.M.A. strongly recommends that the medical profession encourage the widest possible use of the Salk vaccine for the prevention of poliomyelitis. The Salk vaccine has been proved to be effective and since there are still many segments of the population not immunized against poliomyelitis every effort should be made to encourage the general public to take advantage of the Salk vaccine without delay."

The Board report was amended to suggest that a proper committee be established by the A.M.A. to study the problems involved in administration of the new oral polio vaccine and to establish guides for physicians to follow when they are approached by various groups and asked for their support in administering oral polio vaccine.

The House approved a scholarship and loan program proposed by the Special Study Committee of the Council on Medical Education and Hospitals, and also urged that there shall be local participation in the program at the state and county level. In commenting on the two-part program, the House approved the following statement by the reference committee:

"This proposed program will provide concrete evidence of the American Medical Association's sincere desire to attract increasing numbers of well qualified young people to enlarge the ranks of our profession. Your reference committee recognizes that the program is wisely designed to allow for its enlargement through the support of individual physicians and other groups. Your reference committee was impressed with the enthusiastic support of this proposal indicated during the course of the discussion. There was indicated a desire that in the final formulation of the administrative details of this program, provision be made for widespread participation by individual physicians as well as county and state medical societies. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with this Association's belief in individual responsibility."

The problem of foreign medical graduates, was resolved by a report which included the following statement:

"In order that those foreign physicians who have not yet been certified by the Educational Council for Foreign Medical Graduates might be given further opportunity to enhance their medical education, hospitals would be encouraged to develop special educational programs. Such programs must be of educational worth to the foreign graduate and must divorce him from any responsibility for patient care. Foreign physicians may participate in these programs until June 30, 1961, with approval of the Department of State so that their exchange visa will not be withdrawn before that time. This will also allow the non-certified foreign physician the opportunity to take the April, 1961, Educational Council for Foreign Medical Graduates examination."

In considering a wide variety of resolutions, annual and supplementary reports, the House also:

Approved continuing study and periodic re-evaluation of the trend toward locating *physician's offices* in or adjacent to hospitals;

Directed the Committee on Medical Care for Industrial Workers to carry out its duties as previously instructed and to prepare guides for physician relationships with *medical care plans* in conformity with the clear policies already laid down by the House of Delegates;

Approved a set of guides relating to drug expenditures for *welfare recipients;*

Asked the Board of Trustees to study the question of blood replacement responsibility and also the matter of establishing health insurance fee schedules for *surgical assistants;*

Urged the Board to make every effort to reduce the number of physicians who are non-dues-paying members and approved a three-year study report on the relationships of *physicians not-in-private-practice* to organized medicine;

Requested the Board to present a completed *retirement* and *disability* insurance program for A.M.A. members at the June, 1961, meeting, and

Agreed that the *General Practitioner of the Year* Award should be continued as at present.

Named as 1960 General Practitioner of the Year was forty-four-year-old Doctor James T. Cook of Marianna, Florida, who was selected for his dedication to both medical practice and service to the community. Doctor Cook is the fourteenth recipient of the award.

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NECROLOGY, 1960 — THE RHODE ISLAND MEDICAL SOCIETY

JOHN H. BROTHERS, M.D., died on November 4, 1960.

Doctor Brothers was born in Providence on February 16, 1895, and attended the old English High School. He was graduated from Valparaiso University in Indiana and he received his medical degree from Tufts School of Medicine in 1920. He interned at the Charles V. Chapin and Rhode Island hospitals.

He was a member of the staffs of St. Joseph's and Our Lady of Fatima hospitals. For many years he was physician at Providence College.

Doctor Brothers was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and Providence Lodge of Elks.

CHARLES E. BRYAN, M.D., of Riverside, died suddenly on March 8, 1960.

Doctor Bryan was born in North Plainfield, New Jersey, on December 25, 1915. After receiving his elementary and high school education in North Plainfield schools, Doctor Bryan was graduated from Springfield (Massachusetts) College in 1938, and from Hahnemann Medical School in 1942. He interned at Roger Williams General Hospital until he entered the army in 1943. As a medical officer he served at Army Air Force bases throughout this country.

Doctor Bryan was a member of the staff of Roger Williams General Hospital and he had been secretary of its medical staff for the past five years. He was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and president of the General Practitioners of Rhode Island.

He also was a member of the Fraternal Order of Police Association in East Providence, the Riverside Businessmen's Association, Riverside Congregational Church, Rhode Island Badminton Association, and he was a past president and one of the founders of Kindbrin Swimming Club in Riverside.

JOHN E. DONLEY, M.D., of Providence, died on September 17, 1960 after a short illness.

Doctor Donley was born in Providence on January 30, 1880, and he received his elementary education in the schools in Providence and he was graduated from Classical High School. He received the degrees of Bachelor of Arts and Master of Arts from Seton Hall University in South Orange, New Jersey. He matriculated at the Medical School of the University of Pennsylvania and he was graduated a Doctor of Medicine in 1902. He did postgraduate work at the University of Pennsylvania and served an internship at St. Mary's Hospital in Philadelphia. He established himself as a practitioner of medicine in Rhode Island in 1904.

Doctor Donley was on the staffs of the following hospitals: St. Joseph's, Roger Williams, Miriam, Rhode Island, Charles V. Chapin, Butler, Pawtucket Memorial, Woonsocket, and Westerly.

He had been the recipient from the Seton Hall University and Providence College of the honorary degree of Doctor of Laws for his outstanding work in medicine.

In 1935, Theodore Francis Green, then governor, appointed him director of the state Department of Public Welfare and he served in that post four years. He headed the Rhode Island Curative Center from the time it was established in 1944. The center, the first of its kind in the United States, was designed to give injured workmen treatment to enable them to return to industry as quickly as possible.

He was an incorporator and a founder of Providence College.

In 1953 he was cited by President Eisenhower's National Employ the Physically Handicapped Committee for his "outstanding services to the disabled in Rhode Island."

He was presented with the thirteeenth annual Doctor Charles V. Chapin Award of the City of Providence in 1954. It was the first time that the award had gone to a physician.

Providence College had cited him for his work with premedical students.

Doctor Donley was president of the Providence Medical Association in 1931-1932 and president of the Rhode Island Medical Society in 1936-1937. He also served as president of the Rhode Island Society of Psychiatry and Neurology. Active for many years in the Rhode Island Medical Society, he was editor-in-chief of the RHODE ISLAND MEDICAL JOURNAL at the time of his death.

He was a former chairman of the Catholic Charities Appeal, and was a communicant of Saint Sebastian's Church.

Among his friends, Doctor Donley was well known for his extensive library. He remained a frequent reader of Latin and Greek literature. He was a member and a founder of the Medical History Club of Providence and was a member of The Rhode Island Historical Society. He also belonged to the Beaumont Club of Yale University.

FERNAND J. HEMOND, M.D., of West Warwick, died on March 1, 1960 after a short illness.

Doctor Hemond was born on April 13, 1903, in Woonsocket. After graduating from St. Ann's College, de la Pocatiere, P. Q., he entered Laval University Medical School from which he was graduated in June, 1931. He interned at St. Luke's Hospital in Pittsfield, Massachusetts.

Doctor Hemond had been in the general practice of medicine in the Pawtuxet Valley since July, 1932, and he was a former medical examiner.

Doctor Hemond was active in Franco-American circles throughout the state, including the Association des Médecines de Langue Française of Canada, the Association des Médecines Langue Française de la Nouvelle Angleterre, of which he was a former president, the Club Frontenac of West Warwick, which he founded and of which he was a past president, and the Club Marquette of Woonsocket.

Doctor Hemond was a member and past president of the Kent County Medical Society, and a member of the Rhode Island Medical Society.

He was a member of the Holy Name Society of St. John's Parish in West Warwick and the organizer of closed retreats for Catholic laymen in the Pawtuxet Valley.

ARTHUR HOLLINGWORTH, M.D., of North Scituate, died at his home on June 26, 1960.

Doctor Hollingworth was born in Pawtucket, Rhode Island, in 1873 and he attended local schools there before graduating from Brown University. Doctor Hollingworth was also graduated from the University of Pennsylvania Medical School in 1898. He then interned at Rhode Island Hospital.

In 1901 he set up a general practice in Providence where he later specialized in surgery.

Doctor Hollingworth is often credited with the first successful cancer operation in Rhode Island and the first successful blood transfusion.

Entering semi-retirement in 1934, Doctor Hollingworth transferred his practice to North Scituate where he retired in 1940. He had been on the staff at Rhode Island Hospital from the time he started practice until he retired in 1940, and he had been a consultant at the hospital until the time of his death.

Doctor Hollingworth was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and he was a former member of the Providence Art Club.

NATHAN J. KIVEN, M.D., of Providence, president of the Rhode Island Heart Association, and chief of the cardiopulmonary diagnostic clinic at the Miriam Hospital, died on October 16, 1960.

Doctor Kiven was born in Boston, Massachusetts, on July 18, 1910. He was graduated from the University of Colorado and later from the Denver College of Medicine. He interned at Queen's General Hospital on Long Island and was a resident physician at Sea View Hospital on Staten Island, New York.

Doctor Kiven entered the army on December 14, 1940 as a medical officer and he served at Fort Dix, New Jersey, and in the European theater. He attained the rank of major. He was commanding officer of the 26th Hospital Train.

After his discharge in 1946 he started his medical practice in Providence, specializing in internal medicine. He was on the staffs of the Rhode Island, the State, Chapin, and Miriam hospitals.

Elected president of the Rhode Island Heart Association in February, 1960, Doctor Kiven had previously served the organization as vice president, chairman of the program committee, and as a member of its research committee. He was an assembly delegate to the American Heart Association and he had been a member of the board of directors for three years.

He was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, the American Heart Association, Phi Epsilon Medical Fraternity and the Trudeau Society.

ARSHAG DER MARGOSSIAN, M.D., a leader of the Armenian-American ethnic group in Rhode Island and long beloved of his people, died on January 9, 1960, after a short illness in the Rhode Island Hospital, at the age of eighty-seven.

Born in Harpoot, Turkey, on November 21, 1872, Doctor Margossian barely escaped the 1895 Turkish massacres in the region around Harpoot. After his graduation from Euphrates College, an American missionary school in Harpoot, he decided to study medicine in Beirut, Syria. A short time later Doctor Margossian escaped to the United States, arriving in Fall River and after several months there he came to Providence. In this country he did undergraduate work at Yale University and he was graduated from Jefferson Medical College in Philadelphia in 1901.

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At this time Doctor Margossian started his practice of medicine in Providence. He was the first and, until 1916, the only Armenian doctor in Rhode Island. In those early days he had to be social worker, family peacemaker, interpreter and employment agent for his people, as well as the family doctor. In that pre-specialization era he practiced surgery, pediatrics, obstetrics, gynecology, orthopedics and virtually the whole range of the medical art. Doctor Margossian delivered more than five thousand babies during his years of practice.

For many years Doctor Margossian was active in the Armenian Democratic Liberal party and was a former president of that organization. He was also a past president of the Armenian Educational Society of Harbuseh. His medical affiliations included membership in the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association. He was also a member of the Armenian Congregational Church.

ROBERT E. MARTIN, M.D., of Providence, died suddenly on March 23, 1960.

Doctor Martin was born in Providence on August 13, 1922. He was graduated from Moses Brown School and Brown University, class of 1944, and received his Doctor of Medicine degree from Cornell Medical College in 1946. He served his internship at Rhode Island Hospital from 1946 to 1947. He then entered the United States Navy and he was stationed at the Naval Hospital in Newport from 1947 to 1949.

Doctor Martin was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association. He was a diplomate of the American Board of Obstetricians and Gynecologists. He also was a member of the New England Obstetrical and Gynecological Society and he was project obstetrician for the government's Child Development Study in Washington, D. C. He was also a consultant to the collaborative study on obstetrical protocol of the National Institute of Health.

A sports car enthusiast, Doctor Martin was a member of the Narragansett Sports Car Club and the Sports Car Club of America.

Doctor Martin was on the staffs of the Rhode Island Hospital and the Providence Lying-In Hospital.

FRANK J. McCABE, M.D., an eye, ear, nose and throat surgeon in Providence for forty years, died on September 6, 1960.

Doctor McCabe was born in Pepperell, Massachusetts, on May 3, 1880. He graduated from Dartmouth College in 1905 and he received his medical degree from the Harvard Medical School in 1908. After internships at Newton Hospital and Carney Hospital in Boston, he opened a general practice in North Easton, Massachusetts. In 1915 he interned at the Massachusetts Eye and Ear Infirmary.

As a young man he was active in sports, playing baseball and football at Dartmouth and professional baseball in the old Eastern League, the New York State League and the New England League while attending medical school.

Doctor McCabe was a visiting surgeon on the staffs of Rhode Island, Saint Joseph's, the Charles V. Chapin, Pawtucket Memorial, Roger Williams General, Westerly, and Our Lady of Fatima hospitals.

He was a member of the American College of Surgeons, the American Medical Association, the New England Ophthalmological Society, the New England Otological Society, the Rhode Island Medical Society, and the Providence Medical Association.

For many years he was active in the Knights of Columbus as a member of Tyler Council and Bishop Hendricken Assembly, Fourth Degree, and he was state deputy in 1925 and 1926.

CHARLES A. McDONALD, M.D., of Providence, died on July 5, 1960 after a long illness.

Doctor McDonald was born in Providence and lived in that city during his entire lifetime.

Upon graduating from Brown University in 1903 he entered Harvard Medical School where he received his medical degree in 1907, and he then began his practice of medicine.

Doctor McDonald served as a specialist in neurology and psychiatry at Harvard Medical School from 1922 until 1927, when he became a member of the faculty at Brown in the biology department. Later he was named director of the university's health service and professor of health and hygiene.

Doctor McDonald served as chief of the neurology and psychiatry departments at both Rhode Island and Saint Joseph's hospitals, and from 1935 to 1937 was chief of the state Hospitals and Infirmaries Division.

In 1941 he was named by Governor J. Howard McGrath to a seven-member committee to draw up a long-term program for the development of the state institutions.

In June, 1953, he received the honorary degree of Doctor of Science from Brown University.

He was a member of the Providence Medical Association, Rhode Island Medical Society, American Medical Association, American Neurological Association, American Psychiatric Association, Association for Research in Nervous and Mental Diseases, American Psychopathological Association, and New England Society of Psychiatry.

JOSEPH B. McKENNA, M.D., a practicing physician in Woonsocket for twenty-two years, died on December 20, 1960.

Doctor McKenna was born in Dorchester, Massachusetts, on February 10, 1911. He was graduated from Boston College in 1932, and from Tufts Medical School on June 6, 1936.

Doctor McKenna practiced medicine in Uxbridge, Massachusetts, from 1938 to 1940. He was Woonsocket police physician since 1958, and was a past president of the Woonsocket District Medical Society, and a director of Mercy Hospital in Woonsocket.

Besides his affiliation with the Woonsocket Medical Society, Doctor McKenna was also a member of the Rhode Island Medical Society and the American Medical Association.

JOHN A. MELLONE, M.D., a practicing physician in West Barrington for the past fourteen years, died suddenly on May 31, 1960.

Doctor Mellone was born in Providence on February 2, 1908. He was a graduate of Classical High School, Providence College, class of 1929, and Georgetown University Medical School, class of 1933. He served his internships at Saint Joseph's Hospital from 1933 to 1934, and at Charles V. Chapin Hospital from 1934 to 1935.

Doctor Mellone opened his practice of medicine in Bristol in 1935, where he practiced until 1941.

From 1941 to 1945 he was in the army and he served in England and France, retiring as a lieutenant-colonel to again begin private practice, this time in West Barrington.

Doctor Mellone was the senior physician at the Rhode Island Veteran's Home in Bristol, a member of the Bristol County Medical Society, the Rhode Island Medical Society, the American Medical Association, the Holy Name Society of St. Luke's Church in West Barrington, Bishop Hickey Council, Knights of Columbus, of Riverside and Barrington, Disabled Officers Association of Washington, D. C., Barrington Post, American Legion, West Barrington Post, VFW, and DAW Post of Bristol. He was also the Barrington police surgeon.

MIHRAN MISSIRLIAN, M.D., of Providence, died on November 8, 1960.

Doctor Missirlian, who was born in Harpoot, Armenia, August 15, 1892, obtained his premedical at the Euphrates College of the American Missionary School. He received his medical degree at the Sorbonne in Paris in 1923. He interned in Paris at the Cochen Hospital and Ste. Antoine Hospital.

A linguist, he spoke Russian, French and Armenian as well as English. Before coming to the United States he was a medical officer with the Second Black Sea Labor Battalion of the British Army stationed in the Mediterranean area.

He was a major in the medical corps of the Air National Guard, and a member of the Civil Aeronautics Administration, the Aero Medical Association, and the Civil Aviation Medical Association of Paris. For many years he served as examining physician for the Federal Aviation Agency in Rhode Island.

Doctor Missirlian was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and a staff member of Rhode Island Hospital.

LOUIS A. NORMANDIN, M.D., of East Providence, died while vacationing in Florida on February 24, 1960.

Doctor Normandin was born in Fall River, Massachusetts, on March 1, 1893. He studied at the Christian Brothers School in Fall River, and at Williston Academy at Easthampton, Massachusetts. Enrollment in the premedical course at Tufts College preceded his study in Tufts Medical School, from which he was graduated in 1919.

Internship at Saint Elizabeth's Hospital in Boston and the Cambridge Tuberculosis Hospital preceded a year's private practice in Cambridge. In May, 1922, at his own request, he was transferred to the sub-district regional office of the Veterans' Administration in New Bedford, where he served as chief medical officer and later as manager. Consolidation of the southeastern Massachusetts territory and the Providence office resulted in his transfer to the bureau in this city in 1925. In 1928, he was promoted to chief medical officer of the local bureau and manager in 1934.

While serving in the New Bedford office Doctor Normandin joined the Massachusetts National Guard, being assigned as first lieutenant with the 241st Coast Artillery. Three years later he was promoted to a captaincy. When Doctor Normandin finally established residence in this Rhode Island he transferred to the National Guard here and was assigned as commanding officer of the Hospital Company at the Cranston Street Armory. Subsequently, he was made a major.

Doctor Normandin was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

EMERY P. PELLETIER, M.D., of Providence, died on August 8, 1960, after a brief illness.

Doctor Pelletier was born in Manville, Rhode Island, on April 30, 1892. He was graduated from Classical High School, attended Brown University, and graduated from McGill University in Quebec, and he received his medical degree from the University of Montreal in 1927. Doctor Pelletier served his internship at Woonsocket Hospital.

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Doctor Pelletier was a member of the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and the Providence Lodge No. 14 B.P.O. Elks.

Doctor Pelletier was on the staff at Saint Joseph's, Roger Williams, and Notre Dame hospitals.

HERMAN C. PITTS, M.D., of Providence, one of Rhode Island's most prominent physicians, died on August 5, 1960.

The son of an Episcopal minister, Doctor Pitts was born in Saginaw, Michigan, in 1875. Because of his early interest in medicine Doctor Pitts was accepted as a student at Yale Medical School without previous college training. He was graduated from Yale in 1900, receiving a medal offered annually to the man graduating first in his class. After an internship at Rhode Island Hospital, he was a resident for a time at New York Lying-In Hospital. In 1903 Doctor Pitts established himself in the general practice of medicine in Providence after completing additional studies at Johns Hopkins Medical School in Baltimore, but he soon began to specialize in surgery.

Doctor Pitts will long be remembered in the United States for pioneer work in the treatment of cancer and for painstaking clinical research in quest of a cure. In 1922 he started a clinic at Rhode Island Hospital, where he later was to be chief of the surgical staff, for the detection and treatment of cancer in women. At about the same time he began speaking before nonmedical groups so that information on the cancer problem and the means of alleviating it would be disseminated more widely than it had been up to that time.

For many years he took an active interest in the cancer programs at Rhode Island institutions, such as the hospitals, Brown University, and Providence College. Doctor Pitts had suggested that Brown, Providence College, Rhode Island Hospital and the Chaffee Home might correlate their efforts and share their findings.

Doctor Pitts had carried on extensive research himself which was based on the files of 15,000 cancer cases in Rhode Island. His objective was to see whether the various treatments and the results obtained from them would suggest any course of investigation that would lead to the conquering of cancer.

In co-operation with the late Doctor Albert D. Meade and Doctor J. Walter Wilson of the Brown biology department, Doctor Pitts had aided in launching the university's cancer-research program.

In 1942 the Men's Club of Temple Emanu-El named him to receive its community service award for "outstanding achievement in the field of civic improvement, human betterment and advancement of American ideals."

As president of the American Cancer Society Doctor Pitts helped to organize the early campaigns to enlighten the public about cancer and its symptoms, and in 1953 received a medal from that organization in reward for his outstanding services.

At home, meanwhile, he was also aware of the need for a home for terminal care of cancer patients and he became the president of the Hattie Ide Chaffee home upon its establishment.

The Rhode Island General Assembly passed a resolution in 1957 expressing the appreciation of the state for "his outstanding contribution to cancer control activities."

In 1958 Brown University recognized his contributions to the University and to the community by bestowing on him an honorary degree of Doctor of Science.

Besides being a member of the American Cancer Society, Doctor Pitts was also a member of the Providence Medical Association, the Rhode Island Medical Society, of which he was a former president, the American Medical Association, the American College of Surgeons, and the New England Surgical Society. He served as a member of the board of managers of the Saint Elizabeth Home and a member of the board of governors of the English-Speaking Union. He was also a devoted trout fisherman, a facet of his character that was noted by the University Club when it bestowed on him its man-of-the-year award.

HAROLD W. TAYLOR, M.D., of Little Compton, a practicing physician in Rhode Island since 1948, died on September 7, 1959 at the age of seventy-two.

Born in Beverly, New Jersey, on October 13, 1886, Doctor Taylor received his premedical education at Columbia University and he received the degree of Doctor of Medicine from Columbia University College of Physicians and Surgeons in 1915. He served his internship at New York Hospital from 1915 to 1916 and at Presbyterian Hospital (New York) from 1916 to 1917.

Doctor Taylor practiced medicine for many years in New Jersey, moving to Little Compton in 1948.

He was a member of the courtesy staff of Saint Luke's Hospital in New Bedford.

(Editor's Note: Doctor Taylor's obituary was omitted inadvertently in the 1959 Necrology published in this Journal, and it is therefore now included in the 1960 listing.)

MARGARET B. ROSS, M.D., of Rumford, died suddenly on June 26, 1960.

Doctor Ross was born in Holyoke, Massachusetts, on October 12, 1899, and she received her

early education in local schools there. She received her Bachelor of Science degree at Tufts College in 1919 and she was graduated *cum laude* from Tufts Medical School in 1922. She then interned at Western Pennsylvania Hospital from 1922 to 1923.

From 1926 to 1929 Doctor Ross was city physician of Holyoke, Massachusetts, and during the same period was chief obstetrician for the Providence Hospital in Holyoke and assistant surgeon at Holyoke Hospital.

Doctor Ross was the first woman in Rhode Island to join the armed forces in the Second World War.

Doctor Ross was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

FLORIAN G. RUEST, M.D., of Cranston, medical director of the State Division of Tuberculosis Control and president of the New England Tuberculosis Conference, died on June 3, 1960.

Doctor Ruest was born in Pawtucket, Rhode Island, in 1898 and he was graduated from La Salle Academy in 1916. He was a graduate *(cum laude)* of Holy Cross College in 1920, and of Harvard Medical School in 1924. He interned at Rhode Island Hospital and Providence Lying-In Hospital, and he then went into general practice in Providence in 1926.

Doctor Ruest was active in the treatment and control of tuberculosis in Rhode Island for many years. He joined the staff of the Doctor U. E. Zambarano Memorial Hospital at Wallum Lake in 1942, and stayed there until he became medical director of the Division of Tuberculosis Control in the State Department of Health in 1950. He was a member of the board of directors of the Rhode Island Tuberculosis and Health Association, a member of the American Trudeau Society, the medical division of National Tuberculosis Association, the Providence Medical Association, the Rhode Island Medical Society, the American Medical Association, and he was a former member of the New England Obstetrical and Gynecological Society.

Doctor Ruest was also interested in music and he was a member of the choral group choir of Saint Charles Borromeo Church. He was a past president of the Holy Name Society of Saint Charles Borromeo parish.

JAMES J. SHERIDAN, M.D., former Cumberland health officer and school physician, died at his home on October 15, 1960.

Doctor Sheridan was born in Blackstone, Massachusetts, on March 6, 1902. He attended elementary schools in Blackstone and he was a graduate of Blackstone High School. He received his degree of Bachelor of Science in Medicine at Georgetown College in 1929 and his degree in medicine from Georgetown University School of Medicine in 1931.

After serving his internship at St. Elizabeth's Hospital, Brighton, Massachusetts, from July 1, 1931 to April 30, 1933, Doctor Sheridan began the practice of medicine in Valley Falls on August 8, 1933. He continued his practice there until 1952, when he opened an office in Pawtucket.

He served as Cumberland school physician from 1947 to 1954 and as town health officer for four years until 1956. Since 1954 he was a medical rating specialist at the Veterans Administration Hospital, Davis Park, Providence.

Doctor Sheridan was a physician for the Selective Service system during World War II. He was on the medical staff at Memorial Hospital, Pawtucket, from 1934 to 1950 and later he was a member of the medical associate staff there.

He was a member of the Pawtucket Medical Association, the Rhode Island Medical Society, the American Medical Association, Alpha Kappa Kappa medical fraternity, Georgetown University Alumni Association, Georgetown University Club of Rhode Island, the American Red Cross, Pawtucket Lodge of Elks, St. Thomas Council, Knights of Columbus, and the Holy Name Society of Saint Patrick's Church, Cumberland.

RICHARD K. WHIPPLE, M.D., of Rumford, died on June 16, 1960, after a long illness.

Doctor Whipple was born in Ithaca, New York, on December 5, 1916, and he attended elementary schools in Springfield, Vermont. He received his A.B. degree from Brown University in 1938 and his Doctor of Medicine degree from Yale University in 1942. He served his internship at Rhode Island Hospital.

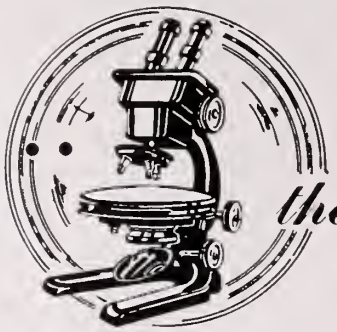
From January, 1944 to April, 1945 Doctor Whipple served in the army as a first lieutenant.

Doctor Whipple was a member of the Providence Medical Association, the Rhode Island Medical Society, and the American Medical Association.

FROM THE EDITOR'S DESK . . .

Appearing in this issue is an excellent review on chest trauma titled *Management of Thoracic Trauma*. This paper has been selected as the first of a projected series of reviews on various medical subjects to be published under the heading of *Progress Notes*. These reviews will be characterized by readability rather than exhaustive bibliography.

SEEBERT J. GOLDOWSKY, M.D.
Editor-in-Chief

THROUGH . . .  the Microscope

Medical Officer Sought for VA Rating Board

The Providence Regional Office of the Veterans Administration is seeking a physician to serve as medical officer on its Rating Boards. The starting salary is $9,735 annually. The rating boards are three member teams of rating specialists (medical, legal and occupational) who rate claims of veterans for disability compensation or pension. The work is sedentary with regular working hours, vacation and sick leave benefits, coverage under Civil Service Retirement or social security system, low cost life insurance, and health insurance. Applicants must be citizens or owe allegiance to the United States, graduates of recognized medical schools, have record of approved internship, and have had at least one year of progressively responsible professional experience in the field of medicine.

Any doctor interested should communicate with Mr. John L. Reavey, Manager of the Providence office at 100 Fountain street.

Federal Government Study Shows Majority Have Voluntary Health Insurance

About two thirds of the civilian noninstitutional population of the United States had some form of voluntary health insurance during the last half of 1959, according to a new report just published by the Public Health Service's U. S. National Health Survey.

In general the rates of coverage were highest in the age groups in which the working population is concentrated, in urban and non-farm areas, in the middle and upper income brackets, and in the Northeast and North Central regions of the country.

The report is based on household interviews conducted during the period July-December 1959, in a representative sample of approximately 19,000 households containing 62,000 persons.

The figures show that about 67 per cent of the civilian noninstitutional population had some hospital insurance, 62 per cent was reported to have surgical insurance, and 19 per cent to have insurance against the cost of physician visits at home or in the doctor's office. They do not indicate whether the insurance paid the entire bills or only parts of them.

Among people under the age of 25, 66 per cent had hospital insurance, 61 per cent had surgical insurance, and 19 per cent had doctor-visit insurance. In the age group 25-44, 74 per cent had hospital insurance, 69 per cent had surgical insurance, and 23 per cent had doctor-visit insurance. In the age group 45-64, the proportions were 71 per cent, 65 per cent, and 20 per cent; and among persons age 65 and over they were 46 per cent, 37 per cent, and 10 per cent.

Health insurance coverage was generally highest in the Northeast and North Central regions of the United States and lowest in the South. The proportion covered in the West was somewhat lower than the national average for both hospital and surgical insurance, but for doctor visits it was considerably higher than in the other regions.

More Dental School Applicants Reported in 1960

A "substantial upturn" in the number of applicants for dental schools examined last fall was disclosed recently by the American Dental Association.

There was a 17 per cent increase in the number of dental school applicants tested last fall compared with a year ago.

The 1,561 applicants examined compare with 1,332 in 1959 and 1,486 in 1958.

The increase was hailed as a "step in the right direction" by Doctor Shailer Peterson, secretary of the Association's council on dental education.

But Doctor Peterson tempered his optimism with a warning that the dental profession still faces a stiff challenge in the area of recruitment if the shortage of dentists predicted for 1975 is to be headed off.

The Association council conducts an aptitude testing program for applicants to all 47 United States dental schools which enable schools to pre-

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IN COLDS AND SINUSITIS— THE RIGHT AMOUNT OF "INNER SPACE" RIGHT AWAY

Neo-Synephrine hydrochloride relieves the boggy feeling of colds immediately and safely, without causing systemic toxicity or chemical harm to nasal membranes. Turbinates shrink, sinus ostia open, ventilation and drainage resume, and mouth-breathing is no longer necessary.

Gentle Neo-Synephrine shrinks nasal membranes for from two to three hours without stinging or harming delicate respiratory tissues. Post-therapeutic turgescence is minimal. Neo-Synephrine does not lose its effectiveness with repeated applications nor does it cause central nervous stimulation, jitters, insomnia or tachycardia.

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NASAL SOLUTIONS AND SPRAYS

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THROUGH THE MICROSCOPE

continued from page 58

dict with a high degree of accuracy the probable success of students.

Federal Employees Health Plan Due for Changes

Joseph Young, staff writer for the *Washington* (D.C.) *Star*, writing in that newspaper on November 27, reported that the Civil Service Commission already is receiving proposal from government employees for changes in the Federal employee health insurance program when new contracts are written this coming spring. According to writer Young the Commission will negotiate new contracts with the various health and insurance carriers, preparatory to the "open" period next October when employees again will enroll under a health insurance plan of their choice.

Among the proposals and complaints being made to the CSC, according to Young, are these:

1. Parents and other family members who are dependent on the employee for total financial support should be covered by the health insurance program.

At present only the employee's spouse and minor children are covered by the program.

Employees complain that it is unfair to exclude a parent or a close relative whose support is entirely dependent upon them. These persons are members of the family household in the strictest sense of the word and should be covered, they contend.

2. Employees who previously were under Blue Cross-Blue Shield before the government's program went into effect, complain that their present Blue Cross-Blue Shield coverage in some aspects is less than it was before.

They can't understand this, observing the total premium paid to Blue Cross-Blue Shield — their contribution plus the government's — is far more than the premium they paid previously. Yet in some aspects the benefits are less, they complain.

CSC officials acknowledge the problem exists, declaring that on the over-all government-wide program some benefits offered were not as high as were previously given to enrollees. On the other hand, they declare that employees now have "catastrophic" type benefits they didn't have before.

The employees contend that practically all of their natural expenses are of the non-catastrophic type and that they find themselves worse off in some respects than were before. This is one of the problems the CSC must face in renegotiating the new contracts.

3. Women employees with non-dependent husbands object strongly to paying higher premiums than other employees. They want to be treated on the same basis as the rest of the government's workers.

Women Prime Victims of Diabetes

Women suffer from diabetes more frequently than men, the Health Insurance Institute reported recently.

There are 871,000 female and 660,000 male diabetics in the United States for a total of 1.5 million persons so afflicted, the Institute said in its report based on data from the U. S. National Health Survey.

Although diabetes mellitus does not rank high in the number of cases, it is eight among the ten leading causes of death, being responsible for 27,500 deaths in the year ending December 1958, said the HII.

The diabetes rate works out to an average of nine cases per 1,000 population, divided between ten cases per 1,000 females and eight cases per 1,000 men.

By age, the highest rate is in the 65-74 age bracket where 50 of every 1,000 women and 34 of every 1,000 men are diabetics, said the Institute. However, from age 75 onward, the rate decreases to 39 cases per 1,000 women and 32 cases per 1,000 men.

Ninety-two per cent of the diabetics were under medical care, and 90 per cent said they had no chronic limitation of mobility due to the disease.



Seventy-five per cent of the sufferers from diabetes said the illness did not affect their day-to-day activities. The disease was responsible for some 1.7 million work-loss days among the "usually working" population, said the HII.

Sectional Meeting for Surgeons Listed for Philadelphia

Surgeons, graduate nurses, and related medical personnel from all parts of the country are invited to attend the annual four-day Sectional Meeting of the American College of Surgeons in Philadelphia, March 6 through 9, 1961. Headquarters will be the Bellevue Stratford, Ben Franklin, and Sylvania hotels, with some sessions scheduled at leading hospitals in the city.

In length and scope this scientific meeting approaches that of the annual Clinical Congress of the College. The program will include hospital clinics, panel discussions, symposia, scientific papers, industrial exhibits, and medical motion pictures in general surgery sessions and in the specialties of obstetrics and gynecology, ophthalmology, otolaryngology, urology, orthopedic surgery, plastic surgery, pediatric surgery, and thoracic surgery.

"How I Do It" clinics, educational demonstrations by surgeons noted for specific techniques, will be presented each morning during the meeting.

Doctor Jonathan E. Rhoads, professor of surgery, University of Pennsylvania Medical School, is chairman of the Local Advisory Committee on Arrangements.

Most Workers Paid If Disabled off Job

More than 43 million American workers are assured that their income will continue in the event they are disabled by off-the-job illness or injury, the Health Insurance Institute reported last month.

As of the end of 1959, insurance companies protected 32,869,000 persons against the loss of income due to disability, and 10,300,000 workers were protected by other arrangements such as formal paid sick leave plans of Federal, state and local governments; private industry; union plans, and employee mutual benefit associations.

The total of 43,169,000 persons so protected — representing 62 per cent of the civilian labor force of 69 million persons — did not include the millions of other employees with some degree of income protection through informal wage-continuation practices, said the Institute. In addition, workmen's compensation provides wage replacement and medical care benefits for workers who are disabled while on the job.

concluded on next page



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In insurance company loss-of-income protection, the insured person may receive, depending on the policy, up to 75 or 80 per cent of his take-home pay.

In the case of accidents, benefits usually start on the first day, and for sickness the common waiting period for benefits is eight or 15 days. However, the insured person may have these payments start one, two or three months after disability begins to coincide the waiting period with the termination of any disability payments made by the employer.

The 43 million persons covered at the end of 1959 was an increase of three per cent over 1958 and a jump of more than 12 per cent over the 38 million so protected at the end of 1952, said the Institute.

In 1959, insurance companies paid out $912 million to replace income lost through disability, including payments made under the accidental death and dismemberment provisions of accident and health policies. This was an increase of seven per cent over the $851 million paid out by insurance companies in 1958 and a jump of 79 per cent over the $510 million paid out in 1952. And in the first nine months of 1960, more than $691 million in loss-of-income benefits were paid by insurance companies.

It seems to me that modern science has created a state of affairs which has no exact precedent in history. As a result of medical progress, the human population is rapidly increasing in numbers and changing in biological characteristics. On the other hand, technology is creating a new environment to which man must become adapted in order to survive. It is not for physicians, of course, to decide what modern life should be, because this choice involves value judgments which transcend medical evaluation. But the final decision should be conditioned by a kind of biological wisdom that only medicine can provide. Thus, whether he wants it or not, the physician will be compelled by the very power of the means at his command to accept increasingly larger social responsibilities. He will have to develop a philosophy taking into consideration not only the welfare of the individual patient, but the interests of the community and indeed the future of the human race. When theoretical physics became an instrument of political power after Hiroshima, physicists were forced to assume responsibility in power politics. Likewise, the power of physicians over life and death has become so great that medicine can no longer be considered apart from social philosophy.

Excerpt from THE PHILOSOPHY OF MEDICINE IN 1985 by RENÉ J. DUBOS, of the Rockefeller Institute for Medical Research, appearing in the Twenty-fifth Anniversary Issue of *What's New*, published by Abbott Laboratories, November 1960.

150th Annual Meeting

May 2 and 3, 1961

Common Cold Takes Heavy Toll

How common is the common cold? This common: In a year's time, there were 115 million colds in the United States severe enough to involve a restriction of activity or to require medical attention.

The Health Insurance Institute, in reporting recently this data extracted from the U. S. National Health Survey, pointed out that the total of colds excluded minor cases of sniffles-and-sneezes.

The 115 million relatively severe colds, said the Institute, made up a large portion of the 368 million acute conditions which were reported among the nation's civilian population during the one-year period ending in June 1959. The survey defined acute conditions as those which lasted less than three months and which restricted activity or needed medical care.

In addition to the colds, there were some 27 million cases of infections such as tonsillitis, sinusitis and laryngitis which made for a grand total of 142 million upper respiratory conditions in a year.

Other prosaic ailments included 20 million cases of the "virus," five million cases of indigestion and similar symptoms, and nearly three million headaches acute enough to restrict activity or require a doctor's care, stated the Institute.

Children Affected: Almost half of the upper respiratory conditions occurred to children under the age of 15, averaging out to 1.3 such infections per child with girls being somewhat more susceptible than boys.

Breaking down the acute conditions by sex, women generally had a higher incidence rate in infections and illnesses while men led in accidents and injuries. The over-all incidence of acute conditions was 224 per 100 women to nearly 205 per 100 men.

Age plays an important role in the incidence of acute conditions, the institute said. The number of such conditions decreased for each succeeding age group from a high of 3.5 conditions per child under age five to a low of 1.3 conditions per person over 65.

These acute conditions caused the loss of 193 million days from work and 191 million days from school. Respiratory conditions, both upper and lower, were the major cause of the lost time, being responsible for 41 per cent of the days lost from work and 58 per cent of the school loss.

Of the 368 million acute conditions, 229 million required medical attention, and 46 per cent of these involved children under 15. Only 19 per cent of adults 45 or older with acute conditions consulted a doctor.

BOOK REVIEWS

SYNOPSIS OF PATHOLOGY by William A. D. Anderson. The C. V. Mosby Co., St. Louis, 1960. 5th Ed. $9.25

The fifth edition of this book is a necessary expansion of the fourth. In the fifth edition, which has been increased by the addition of eighty-six illustrations and forty-six pages, one finds an admirable condensation of the entire field of pathologic anatomy, so that this book is almost a necessity for residents in pathology and the various clinical specialties, as well as for the practicing pathologist himself.

The first three chapters consider the fundamental pathologic processes. The following chapters take up the effects of various micro-organisms, as well as the effects of chemical poisons, nutritional deficiencies and disturbances of growth. The remainder of the book considers various diseases according to organs and systems.

Despite its small size, this edition, like its predecessors, is very abundantly and very well illustrated.

The only fault that I can find is that the print in this edition is not quite so sharp and clear as in the previous edtions.

I recommend this book very highly.

L. W. FALKINBURG, M.D.

CIBA FOUNDATION COLLOQUIA ON ENDOCRINOLOGY. Vol. 13. Human Pituitary Hormones. Editors for the Ciba Foundation: G. E. W. Wolsteinholme and Cecilia M. O'Connor. Little, Brown & Co., Boston, (1960). $9.50

This symposium was arranged in honor of Professor B. A. Houssay of Argentina and took place in Buenos Aires.

There were thirty-two international authorities participating in this symposium, including nine American scientists. It embraces the various scientific aspects of research on the human pituitary gland and is a good reference book for the interested internist who wishes to delve deeper into the subject from a purely laboratory point of view.

It is highly technical, very specialized, but still a good book for reference.

JOSÉ M. RAMOS, M.D.

MEDIEVAL AND RENAISSANCE MEDICINE by Benjamin Lee Gordon. Philosophical Library, N. Y., 1959. $10.00

This is the story of the Dark Ages in medicine, running to over 750 pages exclusive of notes and bibliography. Such a volume can and does cover a great many personalities, both well known and obscure, but unfortunately the sterility of the times is somewhat numbing. One tires of reading of the numerous useless compounds employed. Further, the book is marred by a lack of organization and often repetition. The sections devoted to the various plagues and epidemics are interesting and revealing, and the lengthy index makes a volume that is a useful reference for specific facts of the times. It is not, however, a book that will hold the interests of the average reader from cover to cover.

THOMAS PERRY, JR., M.D.

WOMEN AND FATIGUE. A Woman Doctor's Answer by Dr. Marion Hilliard. Doubleday & Co., Inc., Garden City, N. Y., 1960. $2.95

This is a book about women's most frequent complaint, "fatigue," written by a woman doctor for women, but which men could read and thereby gain much help in understanding their women!

Doctor Hilliard describes the causes of fatigue from the standpoint of metabolism, stress, psychological reactions and personal relationships. She discusses the importance of faith in oneself and God during three significant phases of a woman's life — adolescence, marriage or career and the menopause.

She warns women about the false values of stimulants (medical or alcoholic) or affairs used to overcome fatigue, stating that if each woman tries to learn to know herself and to "love God and do as He pleases," she will be sure to do the right thing and thus will overcome her special fatigue problems.

KATHLEEN M. BARR, M.D.

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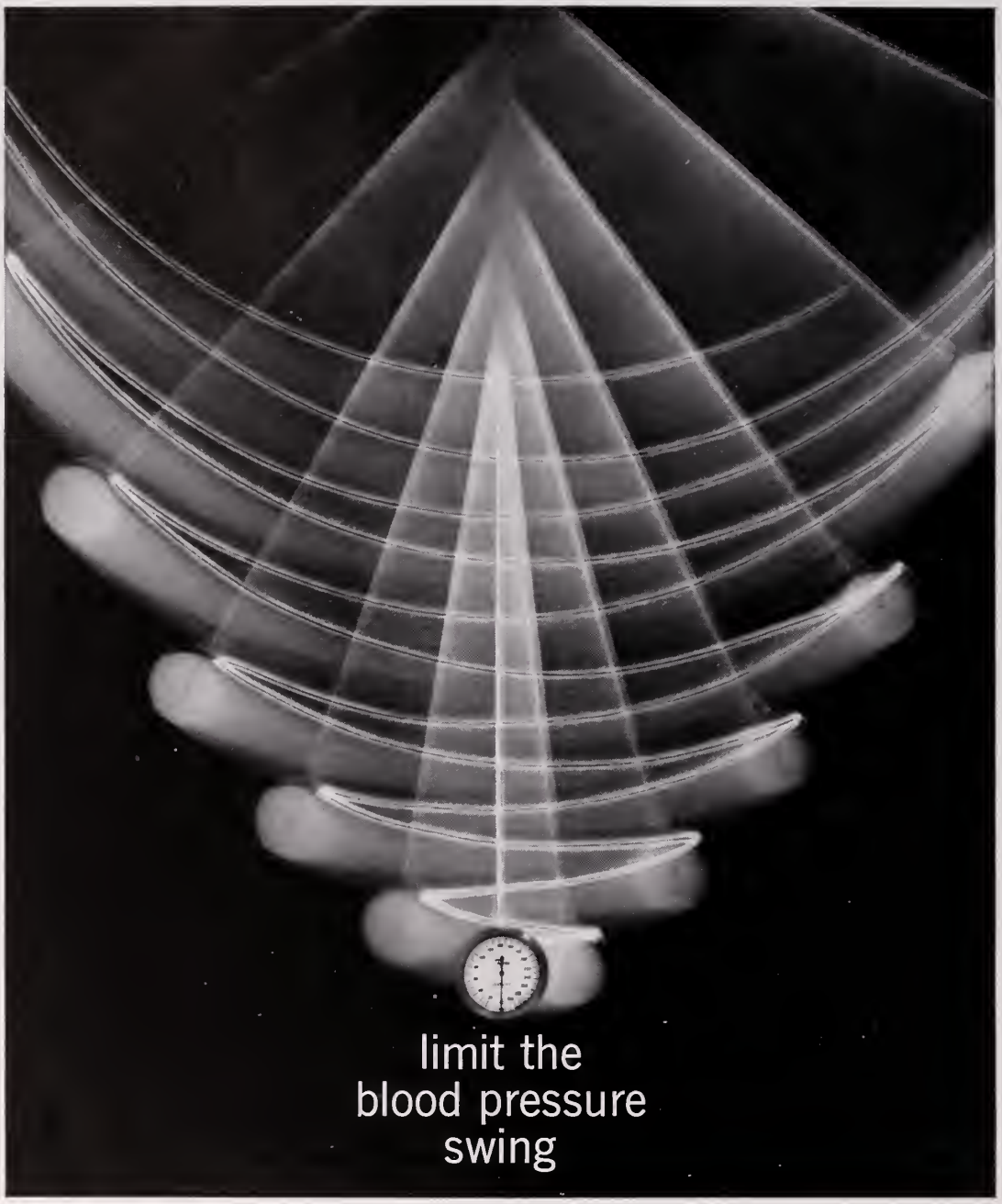
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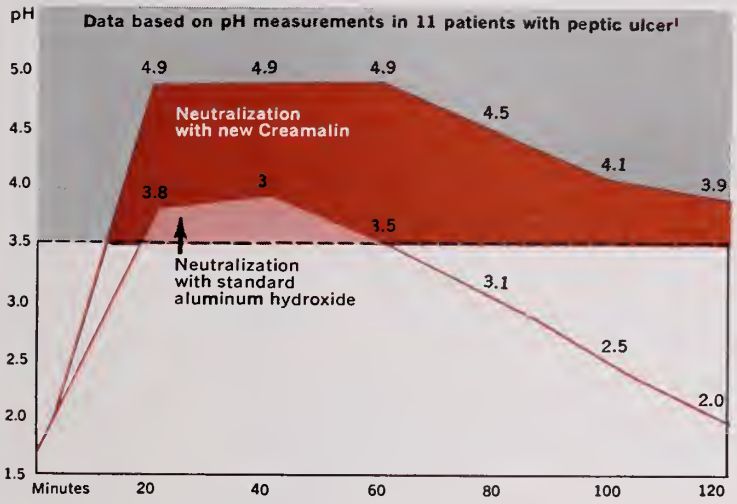
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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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SCANNING THE MEDICAL LITERATURE

Abstracts of Papers Written by Rhode Islanders

AN OCULAR STUDY OF PULSELESS DISEASE. Joseph L. Dowling, Jr. and Taylor R. Smith. Arch. Ophth. 64:236, 1960.

Pulseless disease (aortic arch syndrome) is an extreme and dramatic form of chronic circulatory insufficiency. It is characterized clinically by the absence of detectable pulses and inability to measure blood pressure in the arms and neck, and pathologically by obstruction of the major vessels arising from the arch of the aorta. Two types of the disease occur. The first is inflammatory and has been found usually in young adult Japanese women. The occlusive lesion is a diffuse and nonspecific arteritis. The second type is occlusive vascular disease without inflammation. It occurs in males and females especially during the fifth and sixth decade and is characterized by a selective occlusion of the main arterial trunks from the arch of the aorta. Ocular abnormalities are a common feature of pulseless disease. The early symptoms are those associated with cerebral and retinal artery hypotension, namely syncope, vertigo, blurring of vision, and transient amaurosis. The prolonged retinal arterial hypotension produces structural changes in the eye and particularly in the retina. Injection of India ink into the central retinal artery and vein of a patient with pulseless disease demonstrated a typical hypotensive retinopathy consisting of multiple microaneurysms, irregularly dilated veins with segmented blood flow, and decreased central retinal artery pressures (Figure 1).

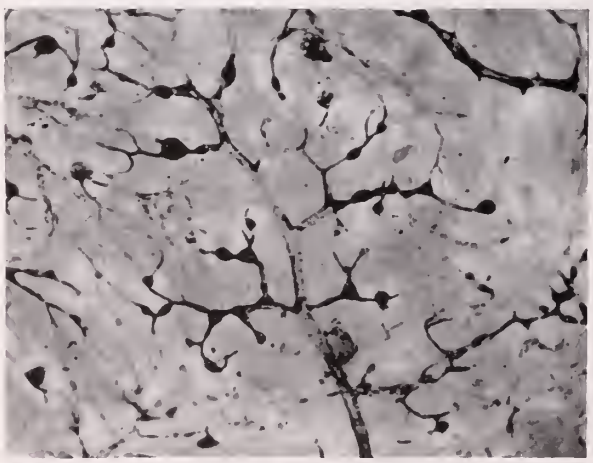


FIGURE 1

India ink injection of vascular tree showing myriad of microaneurysms.

DISEASES OF THE NAILS. Francesco Ronchese, M.D. In: *CURRENT THERAPY — 1960.* Edited by Howard F. Conn. W. B. Saunders Co., Phil., 1960. P. 477.

External nail disorders include bacterial infections, fungal infections, and disorders from contact. Various medications are suggested for bacterial infections. Penicillin in ointment form is not to be used because of its sensitizing property. In regard to fungal infection it is reminded that a diagnosis cannot be made by sight and it is highly improper to prescribe griseofulvin unless pathogenic fungi have been found under the microscope on direct examination and cultures.

The difficulty in treating periungual warts is discussed.

Disorders of the nails of internal or systemic origin are psoriasis, fragility, clubbing, and others. Psoriasis of the nails is a very common disorder. Sometimes the nails return to normal for unknown reasons. Often a diagnosis by sight, viz., without laboratory investigation, of "fungus" of a psoriatic nail is followed by uncalled-for expensive local and internal therapy or for useless gruesome surgical avulsion.

CARCINOMA IN SITU OF THE UTERINE CERVIX. Herbert Fanger, and Thomas H. Murphy. Surg. Gynec. & Obst. 111:177, 1960.

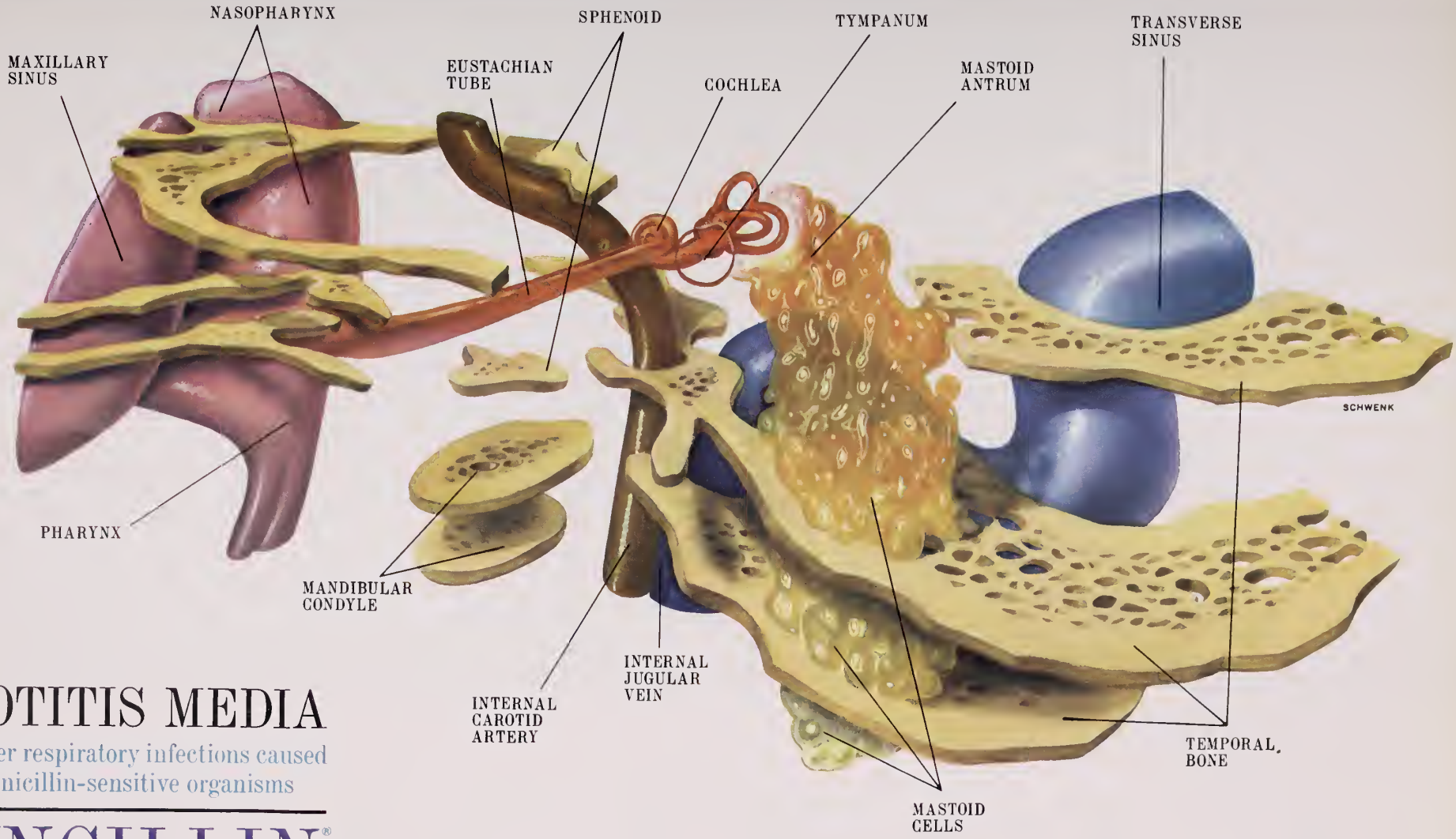
Histologic and topographic studies have been made on fifty-two cone biopsies of the cervix containing carcinoma *in situ* and eleven cases of atypical hyperplasia. Carcinoma *in situ* occurred predominantly in the external cervical os and adjacent endocervix. Frequently, the tumor grew as a continuous sheet over large areas of the endocervix. However, in a significant number of cases, the tumor was limited to small foci so that cone biopsy was deemed preferable to punch biopsy because the larger sample of tissue more likely would demonstrate the lesion.

Hysterectomies revealed residual carcinoma *in situ* in five of twenty-two cases included in the topographic survey and in seventeen other cases. This observation demonstrates the necessity of hysterectomy or careful cytologic follow-up whenever a cone biopsy has revealed intraepithelial carcinoma.

Stromal invasion was infrequently demonstrated. There were two rare cases of carcinoma *in situ* with

continued on page 73

(TEAR ALONG DOTTED LINE)



IN OTITIS MEDIA

and upper respiratory infections caused by penicillin-sensitive organisms

SYNCILLIN®

(phenoxyethyl penicillin potassium)

This diagram represents the lateral aspect of the left middle ear and related structures. The bony landmarks are shown in serial sections.

for your next case in which penicillin is indicated . . .

SYNCILLIN®

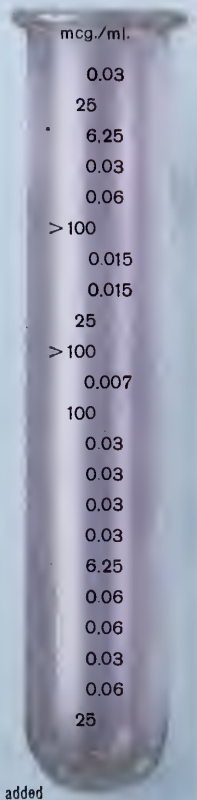
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Effective in vitro antibacterial activity against penicillin-sensitive organisms*

	mcg./ml.
Bacillus anthracis	0.03
Bacillus cereus	25
Bacillus circulans ATCC 9961	6.25
Corynebacterium xerosis	0.03
*Diplococcus pneumoniae	0.06
Escherichia coli ATCC 8739	>100
Gaffkya tetragena	0.015
Micrococcus flavus	0.015
Salmonella paratyphi A	25
Salmonella typhosa	>100
Sarcina lutea ATCC 10054	0.007
Shigella sonnei	100
Staphylococcus aureus 209P	0.03
Staphylococcus aureus var. Smith	0.03
Streptococcus agalactiae ATCC 1077	0.03
Streptococcus dysgalactiae ATCC 9926	0.03
Streptococcus faecalis PCI 1305	6.25
*Streptococcus pyogenes 203	0.06
*Streptococcus pyogenes Digonnet	0.06
Streptococcus pyogenes 2320	0.03
Streptococcus pyogenes 23586	0.06
Vibrio comma	25

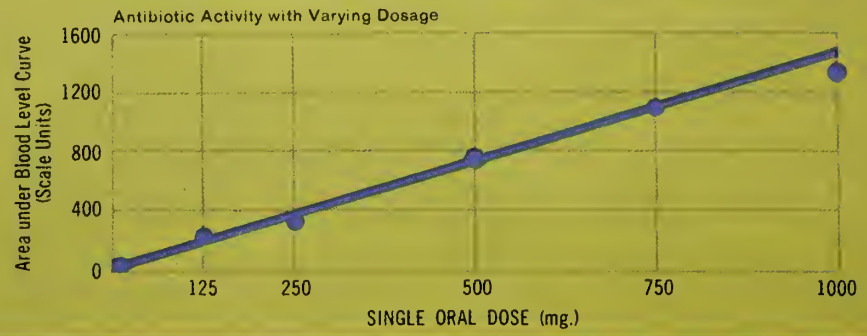


Serial dilution technique in heart infusion broth *10% serum added

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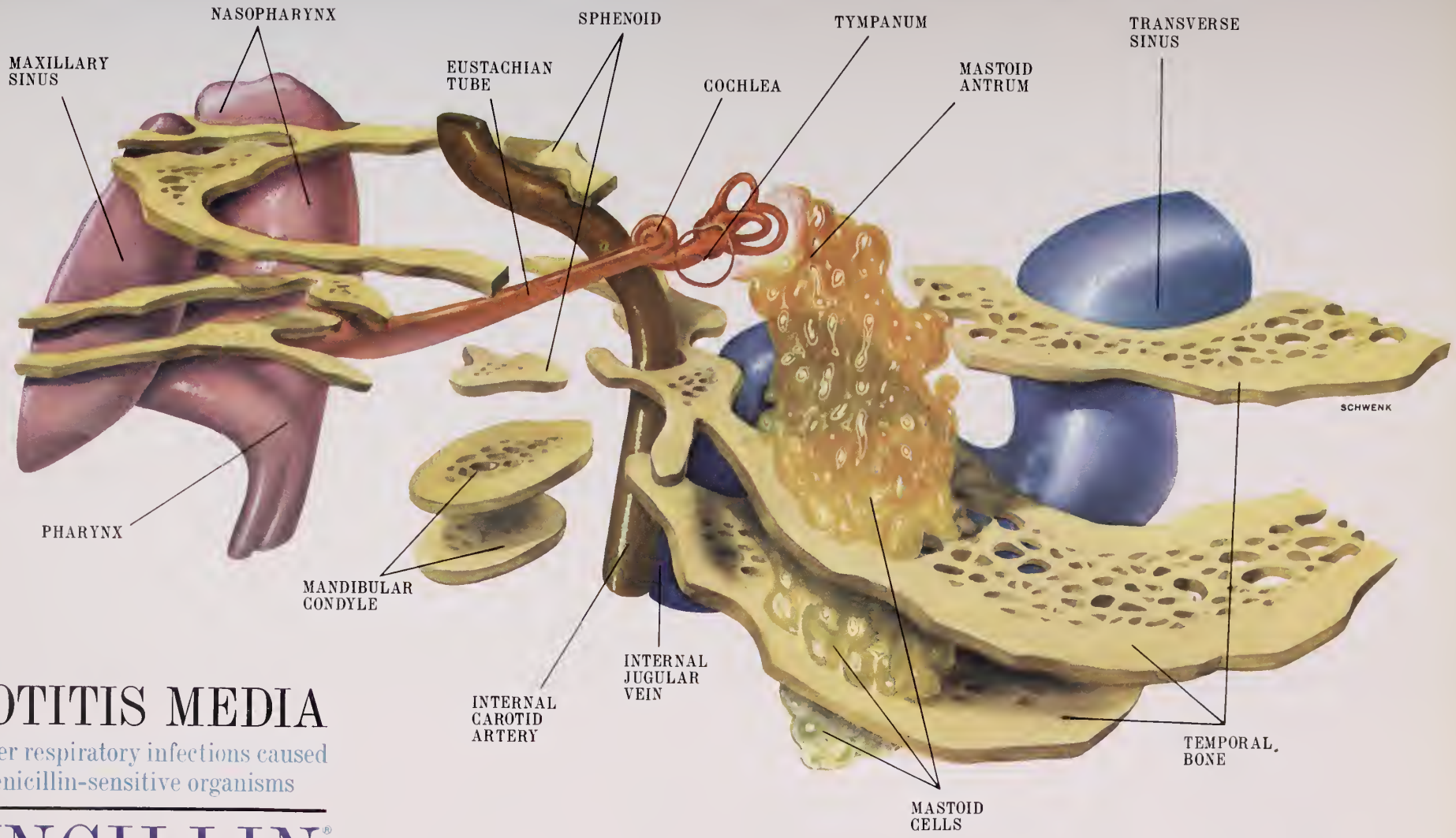
Direct control of blood levels: serum concentration proportional to size of dose*



*As is true with all antibiotics, clinical response does not always correlate exactly with in vitro bacterial sensitivity reports or laboratory blood level findings. However, these are useful guides.

Dosage: 125 mg. or 250 mg. 3 times a day, depending on severity of the infection, and on age and weight of the patient. Larger dosage (e.g., 500 mg. t.i.d.) may be used for more severe infections. Although maximum absorption is obtained in the fasting patient, clinically adequate blood levels are almost always obtained when SYNCILLIN is administered with meals. Treatment should be continued until physician is confident infection has been overcome. ☐ Beta-hemolytic streptococcal infections should be treated for at least 10 days to help prevent the development of rheumatic fever. Even more prolonged therapy may be required for certain staphylococcal infections. ☐ Complete information on indications and precautions is included in the official circular accompanying each package.

(TEAR ALONG DOTTED LINE)



IN OTITIS MEDIA

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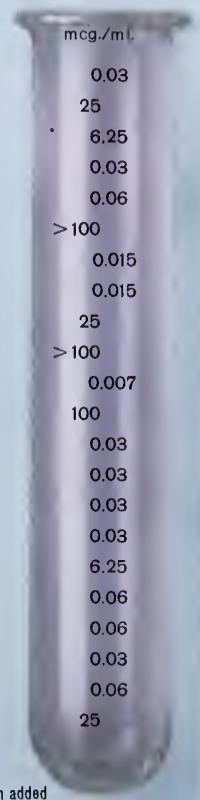
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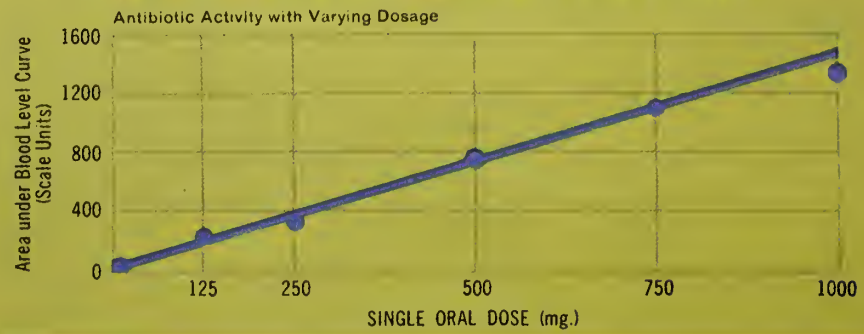


Serial dilution technique in heart infusion broth *10% serum added

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Direct control of blood levels: serum concentration proportional to size of dose*



*As is true with all antibiotics, clinical response does not always correlate exactly with in vitro bacterial sensitivity reports or laboratory blood level findings. However, these are useful guides.

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SCANNING THE MEDICAL LITERATURE

continued from page 72

lymphatic invasion. In one, the lymphatic permeation was unusually extensive and there were metastases to regional lymph nodes.

TUBERCULOSIS SPONDYLITIS. A. A. Savastano and John G. Pierik. Am. J. Orth. 2:215, 1960.

It is observed that tuberculous spondylitis involving bones and joints has become uncommon. The reasons for this are numerous and well known. However, the orthopedic surgeon of today may still encounter an occasional case of tuberculosis which demands his skill and knowledge for successful treatment and a satisfactory functional result. The basic general principles of therapy have been dramatically altered since the introduction of the antituberculosis chemotherapeutic agents, which in turn have made possible direct, definite surgery in so many cases.

The authors present a single case study of a patient with tuberculous spondylitis which presented a diagnostic problem. A review of the combined chemotherapy and surgical intervention leading to a successful outcome is presented.

It is pointed out that chemotherapy has been dramatic in its effect and has made direct surgical intervention possible in cases where surgical treatment could not be offered prior to the days of antituberculous chemotherapy. The isonicotinic acid hydrazides, and particularly iproniazid (Marsilid) are at present the drugs of choice in treatment. Biopsy of suspected lesions should be done early and is frequently important for diagnosis. Anterior body fusion in Pott's disease is now considered a safe and successful procedure.

FATAL MYOCARDIAL INFARCTION IN PREMENOPAUSAL WOMEN. Report of Autopsied Cases. George F. Meissner and Daniel Moore, Jr. Lab. Invest. 9:142, 1960.

Myocardial infarction in premenopausal women without associated factors is almost unknown. In most instances, diabetes or hypertension is present, conditions which tend to increase the incidence of myocardial infarction in older women and in men in general. A case of acute myocardial infarction, found at autopsy of a twenty-three-year-old white woman, is described, which was associated with familial hypercholesterolemia. A review of autopsied cases from the literature and of eight additional cases from the files of the Rhode Island Hospital indicated strikingly the rarity of this condition, particularly in the absence of associated pathology. This appears to be the largest series of cases reported of fatal myocardial infarction, verified by autopsy, in premenopausal women. In men of comparable age (under 49) who had no associated pathology fatal myocardial infarction has been found to be more frequent than in women; but even in young men, as in premenopausal women, the incidence of myocardial infarction is far greater when there are associated diseases.

LE UNGHIE NEL LICHEN PLANUS (The Nail in Lichen Planus). Francesco Ronchese. Atti Soc. Ital. D.e S.e Sez. 34:715, 1959. Reg. Suppl. # 12, Minerva Dermat. v. 34, 1959.

In the majority of cases of lichen planus of Wilson no ungual changes are observed. However, in about 2 per cent of the cases, there are abnormalities such as longitudinal ridges, more or less deep fissures and thinning of the nail plate. Future investigation, including histologic studies, may indicate whether or not there is an ungual lichen planus analogous to ungual psoriasis.

SERUM LIPIDS AND ARTERIOSCLEROSIS IN PROSTATIC CANCER PATIENTS. George F. Meissner and Constance C. Moehring. Circulation 22:788, 1960.

In order to test the hypothesis that castration and estrogen therapy in men leads to serum lipid changes accompanied by amelioration of arteriosclerosis, serum lipids were determined periodically in 163 patients with prostatic carcinoma. These were treated for periods of four months to two and one-half years by orchiectomy and estrogens, which generally resulted in gynecomastia. Twelve of these patients have come to autopsy. Their coronary arteries and aortas were evaluated grossly for the degree of arteriosclerosis and particular attention was paid microscopically to the presence or absence of "early and active" lesions. The gross specimens are being saved for a simultaneous final grading at the conclusion of the study.

To date, it would appear, that there were only slight serum lipid changes and that there was no definite correlation between these and arteriosclerosis found at autopsy, which could be considered a result of castration or estrogen therapy. A series of ten untreated prostatic cancer patients found at autopsy during the same period of time showed no significant difference as to the degree of arteriosclerosis, when compared to the treated cases.

MEDICAL EDUCATION IN COMMUNITY HOSPITALS. Alex M. Burgess, Sr. Ann. Int. Med. 52:1363, 1960.

Community hospitals in the United States care for more than seventy-five per cent of the patients who suffer from acute medical or surgical condi-

continued on page 76



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SCANNING THE MEDICAL LITERATURE

continued from page 73

tions. About half of them offer approved intern and or resident training. Most of the physicians appointed to their house staffs are graduates of medical schools outside the U.S.A. and Canada. Some of these foreign graduates have shown evidence of poor basic medical education but many are able and well-educated physicians.

Screening by the Educational Council for Foreign Medical Graduates will protect American patients from being cared for by poorly trained doctors in any of our hospitals and it is to be hoped that enough foreign physicians will wish to come to this country so that the experience which they seek can be afforded to them and good programs of education can be maintained with the resulting improvement in patient care and staff education. Of the sixty-two community hospitals in New England which support approved programs more than half have appointed directors of Medical Education, either half- or full-time.

CERVICAL PREGNANCY WITH MISSED ABORTION. Report of a Case. Stanley D. Davies and Paul E. Barber. Obst. & Gynec. 15:439, 1960.

Until 1945, when Studdiford made a survey of the world literature, cervical pregnancy was not recognized as a definite clinical entity by most American textbooks of obstetrics. Since then, many reports have appeared in the literature. Schneider and Dreizin made a very comprehensive and critical review of the world literature on this subject in 1957. They accepted only seventeen of the sixty cases reported as true cervical pregnancy.

The authors in this report present a case of a forty-three-year-old housewife who was admitted to the hospital for a routine curettage for menometrorrhagia. At the time of the curettage, a profuse hemorrhage was encountered which required a total abdominal hysterectomy to control the bleeding. The pathological report proved the case to be one of cervical pregnancy with the placentation limited to the region of the endocervical canal. A colored photograph of the gross specimen and photomicrographs of the chorionic villi in the region of endocervical glands were submitted to prove the diagnosis.

From the history this case was classed as a missed abortion of a true cervical pregnancy because more than two months had elapsed between the initial hemorrhage and the attempted curettage. Other conditions that supported the diagnosis of a missed abortion were: (1) a regressing corpus luteum of the ovary, (2) degenerating chorionic villi in the endocervix, (3) a closed cervix, (4) failure of the cervix to increase in size during the period of observation, and (5) absence of decidua in the uterus. To the best of the authors' knowledge, this is the first case of missed abortion of a true cervical pregnancy to be reported in the American literature.

PSEUDOPELADE. Francesco Ronchese. A.M.A. Arch. Dermat. 82:336, 1960.

Loss of hair with a distinct clinical pattern and with histopathology which was not pathognomonic was described by Brocq in 1885 under the name of pseudopelade. Its etiology still remains obscure. Recent studies suggested that lichen planus of the scalp could be the cause of the alopecia. To date there is insufficient evidence that any disease, external or systemic, is the cause of pseudopelade. Lichen planus is particularly doubtful because of its rarity on the scalp. The term pseudopelade, limited to the loss of hair with a pattern of alopecia areata and with unknown etiology, should remain because it has been in use for seventy-odd years and cannot be replaced by a satisfactory English term. The term alopecia cicatrisata should not be used as a synonym of pseudopelade, but should be limited to loss of hair of known etiology, such as, for example, that from chronic discoid lupus erythematosus, sarcoidosis, or metastases to the scalp from internal cancer.

ARTERIAL EMBOLECTOMY. Seebert J. Goldowsky and J. Robert Bowen. J.A.M.A. 172:799, 1960.

This study deals with the results of arterial embolectomy performed over an eleven-year period ending January 1, 1959. The presentation of 100 per cent follow-up is a unique feature of this work since other studies fail to consider this aspect of the subject.

Forty-six operations in forty-two patients, ranging in age from thirty-eight to eighty-two years, were encountered. All but one of the operations was performed at the Rhode Island Hospital, and thirteen embolectomies on twelve patients were done by the senior author. Twenty-six of the total group had auricular fibrillation, and fourteen patients with an average age of 53.8 years had rheumatic heart disease. The others had an average age of 66.5 years.

In thirty-five of the forty-two patients, the heart was presumably the source of the embolus. In the remaining seven cases, no source of origin of the emboli was found. Five of these cases were autopsied.

Twelve surviving cases were placed on long-term anticoagulant therapy. Results in this group of cases were good since no case developed a major

embolus while under adequate control. One of these patients died of a massive retroperitoneal hemorrhage after sympathectomy.

Operative mortality (hospital deaths) was 37 per cent. Among the survivors, limb salvage was 100 per cent; 27.3% of patients still survive who were operated on two years or more prior to the closing date of this study.

Mortality was not significantly altered in this series with respect to whether the operation was performed before, or after eight hours had elapsed from, the onset of symptoms. Nevertheless, delay in instituting surgery must influence survival and limb salvage.

TRAUMATIC COMPRESSION FRACTURES OF THE DORSOLUMBAR PORTION OF THE SPINE. A. A. Savastano and John G. Pierik. J. Internat. Coll. Surgeons 34:93, 1960.

This is a study of 159 cases of stable traumatic compression fractures, in which the patients were admitted to the Rhode Island Hospital in Providence, from 1953 to 1959. Of the 159 cases, forty were reappraised two to seven years after the initial trauma.

A breakdown of the total number of patients admitted is made as to age, sex, nature of injury, vertebral body involved, symptoms and signs presented and form of treatment used. In forty cases a comparison of the results obtained is made between a group treated by reduction and immobilization (nonfunctional type of treatment), and another group treated by no reduction, no support or minimal support (functional type of treatment).

Patients treated by the functional method remained in the hospital for a shorter period than did those treated by the nonfunctional method. Patients treated by the functional method returned to work sooner than did those treated by the nonfunctional method. In a large number of patients treated by the reduction-immobilization method the compressed fractured vertebra settled to the position of original impaction two to seven years after the original injury. The majority of the patients returned to their former occupations regardless of the type of treatment chosen. In the lumbar portion of the spine, the first lumbar vertebra was injured most frequently, while in the dorsal segment the twelfth dorsal vertebra was the one most commonly injured.

MEDICAL EDUCATION AND PRACTICE IN ISRAEL. Alex M. Burgess, Sr. New England J. Med. 263:283, 1960.

The State of Israel with a population of two million, more than half of which is made up of immigrants from all over the world, has faced and successfully solved the question of how to deal with the medical care of this great influx of people and at the same time keep medical standards at a high level and medical education continuously progressing. In a two weeks' visit in connection with a staff exchange between Poriah Hospital, Tiberias and Miriam Hospital, Providence, the writer was privileged to obtain an over-all view of medical education and practice. This can be outlined as follows:

Undergraduate medical education is conducted at the Hebrew University–Hadassah Medical School which has a distinguished faculty and, with the completion of the new medical center about three and a half miles from the center of Jerusalem, will be housed in one of the finest set of buildings to be found anywhere. Graduate education is carried on in the government hospitals and those of the Kupat Holim, the sick fund of the General Federation of Labor, and, of course, in the hospital of the University. The hospitals are manned by highly selected experts in the various specialties. The large number of immigrant physicians who came to the country with their countrymen are practicing among the people with whom they came and are manning the clinics of the Kupat Holim. Great efforts are being made to provide post-graduate education for these physicians. As some of them are not basically well trained, the arrangement whereby their work is mostly in out-patient clinics, while serious disease is dealt with by experts in the hospitals, results in a generally high grade of patient care throughout Israel.

CONTACT DERMATITIS FROM CINNAMON. Arthur B. Kern. A.M.A. Arch. Dermat. 81:599, 1960.

Since the first published report of contact dermatitis from cinnamon in 1897 there have been only occasional reports of dermatitis from it or from cassia, which is often used as its substitute. The volatile oils of these substances, both plant extracts, contain as their chief ingredient a powerful irritant, cinnamic aldehyde. Although these oils are present in very small amounts in cinnamon powder employed by bakers and confectioners, they nevertheless pose a definite risk.

A candy factory worker was seen because of a typical contact dermatitis involving hands, abdomen, and thighs. For two weeks prior to the onset of the eruption his job had involved carrying heavy batches of candy used in the production of "cinnamon hearts." Because of its weight, he would frequently support the mass of candy on his upper thighs and abdomen. Patch testing revealed a weak reaction to oil of cinnamon leaves and a very strong reaction to cinnamic aldehyde, both ingredients of

concluded on next page

the cassia flavor in the "hearts."

Reactions to cinnamon and cassia are relatively uncommon but they must be kept in mind as possible causes of contact dermatitis, particularly in bakers and confectioners.

DERMATOFIBROSARCOMA PROTUBERANS. Review of the Literature and Report of Four Cases. Bencel L. Schiff, Mauray J. Tye, Arthur B. Kern, Giuseppe Moretti and Francesco Ronchese. Am. J. Surg. 99:301, 1960.

The French dermatologists, Darier and Ferrand, described this entity first in 1924. The diagnostically most important feature, the potato-like appearance of the tumor, is shown in the illustration reproduced from Darier and Ferrand's paper.

The origin of the tumor is still uncertain. Considerable controversy exists in regard to the histopathology. The most important feature remains its non-specificity. The clinical appearance remains the most important diagnostic feature. The tumor is locally malignant. It recurs if incompletely removed. Metastases have been reported in a few cases, but without autopsies.

Four cases of this disorder are reported and the literature extensively reviewed.

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JOE—THEN AND NOW. Laurence A. Senseman. Listen 13:10, July-Aug. 1960; *DICK—ASKING FOR THE WORST.* Laurence A. Senseman. Listen 13:14, Sept.-Oct. 1960; *AUNT BESS—DEFICIENT IN VITAMIN B.* Laurence A. Senseman. Listen 13:14, Nov.-Dec. 1960.

A series of three articles appeared in LISTEN magazine, a magazine published in the interest of scientific education for the prevention of alcoholism. These three articles were the first of a series of five articles on the effects of alcoholism on the central nervous system.

Joe—Then and Now is a story of a patient who had been drinking over a long period of time. He was rarely every drunk but his continuous drinking had impaired his judgment, wrecked his marriage and destroyed his business. He was an intelligent, well-educated man who had been ruined intellectually by alcohol, a not uncommon occurrence seen today in those who drink persistently.

Asking for the Worst is the second article in the LISTEN series of case studies in which "Dick" was injured in an automobile accident while driving under the influence of alcohol. He developed a subdural hematoma that was not recognized until the following day. Intracranial bleeding is enhanced by a prolonged bleeding time in the alcoholic and a fatal hemorrhage may occur. Alcohol is responsible for the high rate of automobile accidents resulting in death.

The third article deals with a patient "Aunt Bess" with a polyneuritis due to Vitamin B deficiency. This was the result of prolonged bouts of drinking without a proper diet. Her eventual death was due to vitamin deficiency and other complications.

Two more of this series of articles will appear in 1961.

ABSTRACTS SOUGHT

The editors invite Rhode Island physicians who have papers published in other journals to submit abstracts of such papers, not to exceed two hundred (200) typed words, for publication in the RHODE ISLAND MEDICAL JOURNAL.

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MAY 2 and 3, 1961

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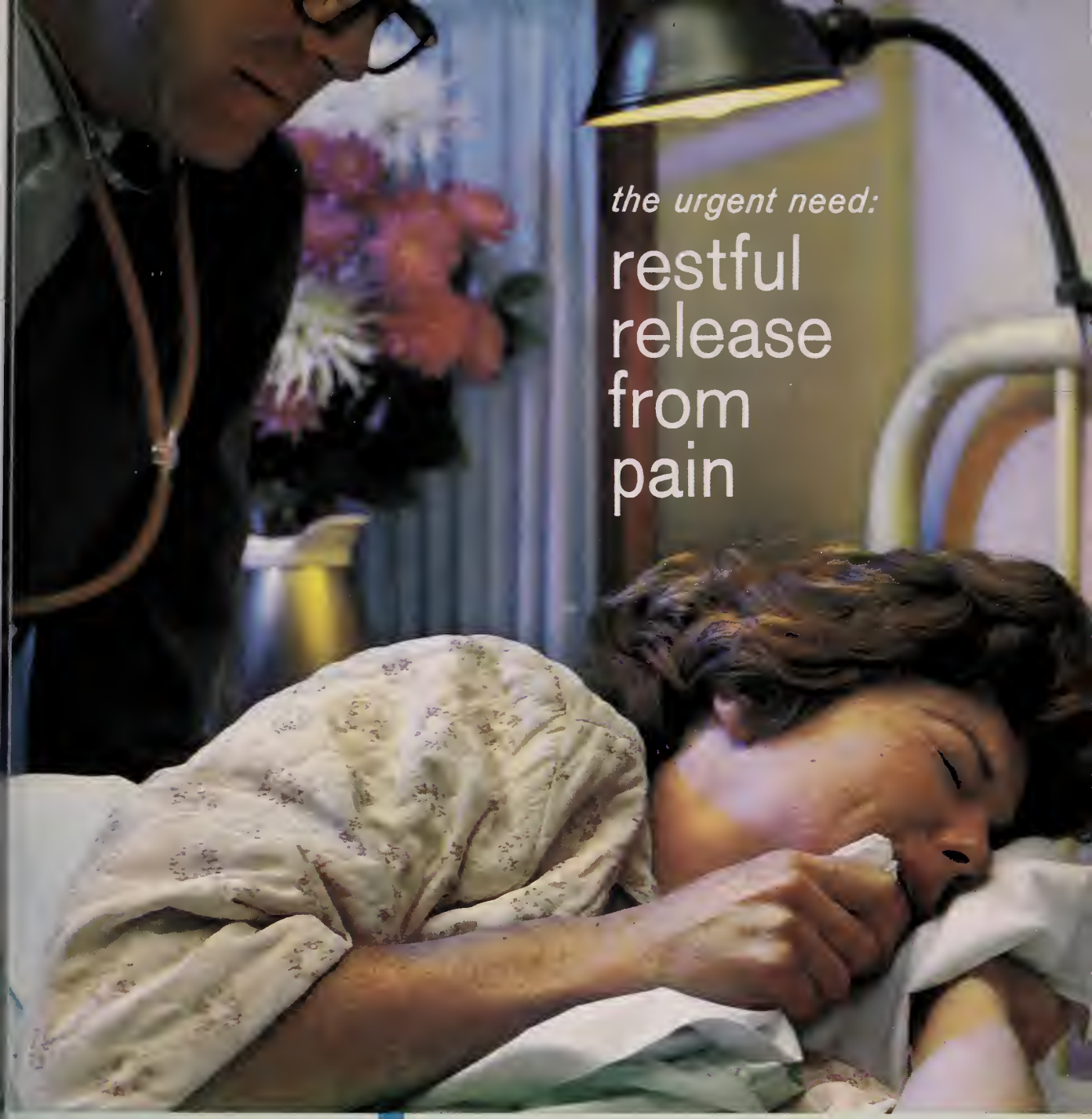


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PHENAPHEN with Codeine ..... ¼ gr.

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PHENAPHEN with Codeine ..... ½ gr.

AHR

PHENAPHEN No. 4

PHENAPHEN with Codeine ..... 1 gr.

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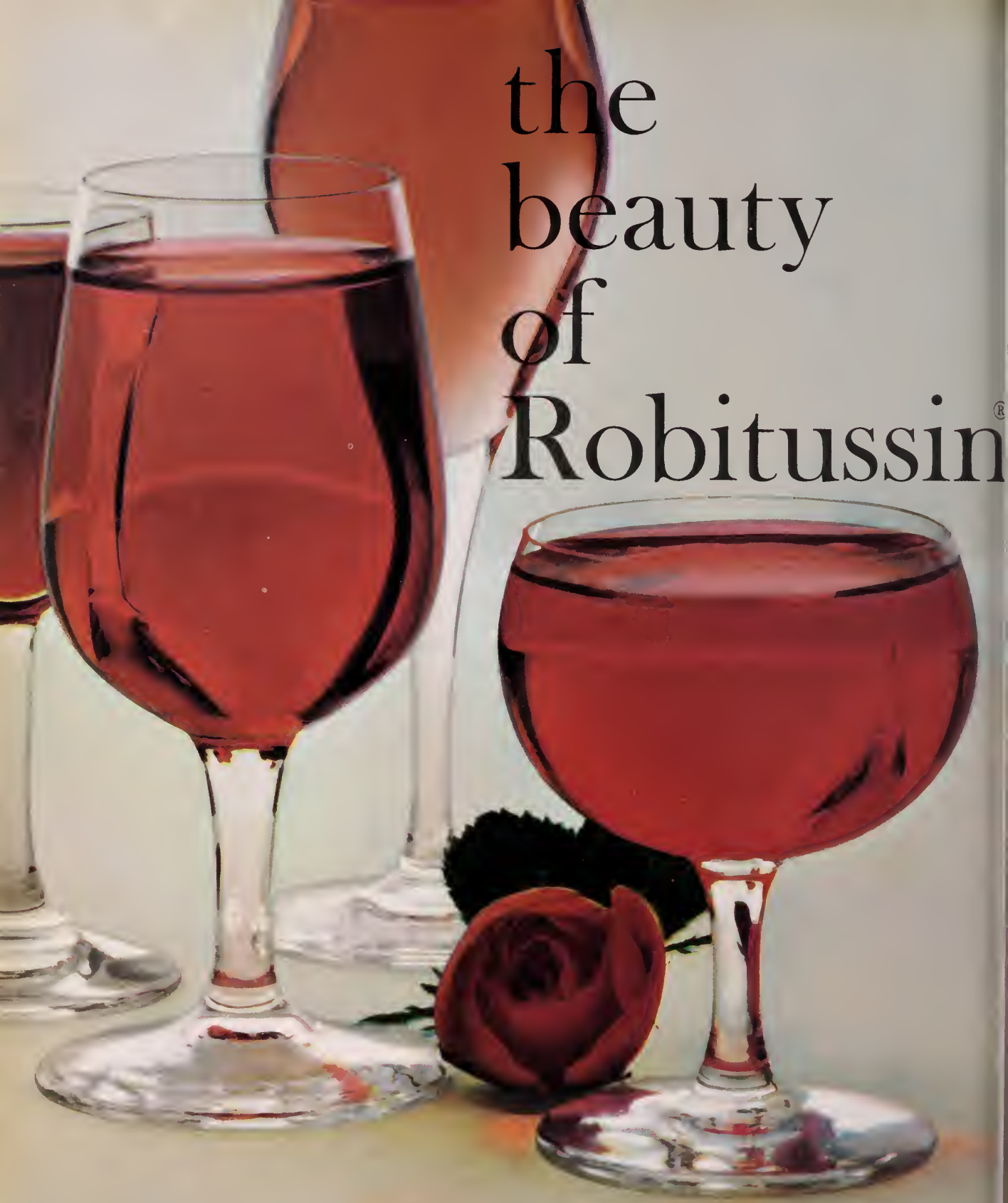
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PHARMACEUTICALS 1878 RESEARCH

MILK COMMISSION REPORT — PROVIDENCE MEDICAL ASSOCIATION, 1960

Certified milk in Providence during 1960 was obtained from the following farms: Cherry Hill Farm, North Beverly, Mass.; Hampshire Hills Farm, Wilton, N. H.; Hillside Farm, Cranston, R. I.

Through the courtesy and co-operation of the Boston Commission we have accepted their certification of one farm from Massachusetts and one from New Hampshire.

All of the herds are under State and Federal supervision and are free from Tuberculosis and Brucella abortus infections.

The Commission, six years ago, discontinued the sale of Raw Certified Milk in the Providence market to conform with the standards in most of the larger cities. The legal standard for Pasteurized Certified milk is still 500 colonies per ml. and the actual count on all samples examined by this Commission the past year was 208 colonies per ml.

Vitamin D Certified Milk is defined as whole Certified Milk rendered antirachitic by irradiation or by the addition of a concentrate and shall be of sufficient vitamin potency to show, by biological assay, a content of at least 400 U.S.P. units per quart.

The Wisconsin Alumni Research Foundation of Madison, Wisconsin, has been doing the assaying of Vitamin D from Hillside Farm and the results have been entirely satisfactory. For the coming year we shall accept the report of this test from the State Milk Inspector.

Certified Fat-free (Skim) Milk, containing not more than 0.05 per cent butter fat, and with Vitamin A added has conformed to the standards set by the American Association of Medical Milk Commissions.

During the past year the analysis of milk samples has been performed in the laboratory of the Milk Department of Providence, which is located at the Charles V. Chapin Hospital. Doctor Joseph Smith, the Milk Inspector, and his assistant, Mr. Richard S. McKenzie, have been most co-operative in doing this work for the Milk Commission.

During the summer months there was found a noticeable increase in Coliform bacteria in the pasteurized milk supply of greater Providence area. In all the Certified samples tested this past year, only six (6) samples had Coliform colony count above 10 per ml.

The Sanitary Inspector is appointed by the Commission to supervise the sanitary conditions at the farm and the physician is responsible for the health of the employees at the farm. Both of the men are licensed practitioners. The Veterinarian to the farm is also appointed by the Commission.

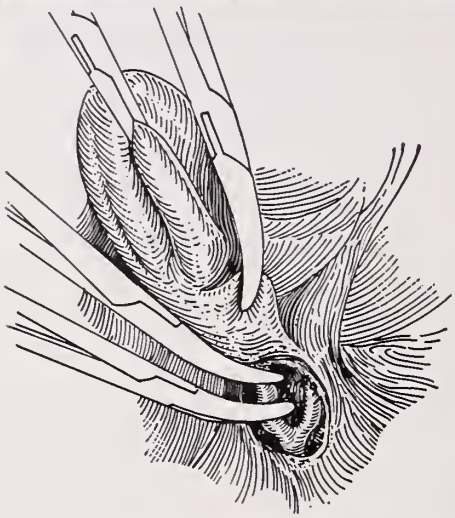
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	CHERRY HILL H. P. HOOD			HAMPSHIRE HILLS						HILLSIDE FARM					
	Pasteurized			Pasteurized			Skimmed with Vit. A & D			Pasteurized			Skimmed with Vit. A & D		
	B.F.	T.S.	Bac.-teria per C.C.	B.F.	T.S.	Bac.-teria per C.C.	B.F.	T.S.	Bac-teria per C.C.	B.F.	T.S.	Bac.-teria per C.C.	B.F.	T.S.	Bac-teria per C.C.
January	4.2	13.00	17	4.7	13.91	770	.36	8.92	650	4.2	13.07	25	.....	.....	.....
February	4.3	13.26	55	4.7	14.14	55	.02	8.89	470	4.2	13.07	17	.....	.....	.....
March	.....	.....	.....	4.6	13.72	726	.....	.....	.....	4.2	13.12	171	.....	.....	.....
April	.....	.....	.....	4.7	14.01	630	.....	.....	.....	3.9	12.72	125	.....	.....	.....
May	.....	.....	.....	4.7	13.97	810	.....	.....	.....	4.0	12.67	38	.....	.....	.....
June	4.1	12.90	107	4.7	13.94	906	.....	.....	.....	4.0	12.80	122	.....	.....	.....
July	4.0	12.86	35	4.6	13.80	582	.....	.....	.....	3.9	12.63	230	.....	.....	.....
August	4.1	12.85	20	4.7	13.78	290	.05	8.80	242	4.1	12.66	115	.....	.....	.....
September	4.1	12.84	84	4.7	13.73	335	.18	8.84	30	4.0	12.67	101	.....	.....	.....
October	4.1	12.94	65	5.2	14.68	140	.....	.....	115	4.1	12.95	66	.....	.....	.....
November	4.2	13.09	44	5.0	14.43	965	.....	.....	60	4.1	12.92	100	.01	8.91	90
December	4.0	12.70	25	.....	.....	.....	.....	.....	.....	3.8	12.82	20	.01	8.91	56
Yearly Average	4.1	12.93	50	4.7	14.01	564	.15	8.86	261	4.0	12.84	94	.01	8.91	73

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Source: Farris, J. M., and Smith, G. K.: M. Clin. North America *43*:1133 (July) 1959.

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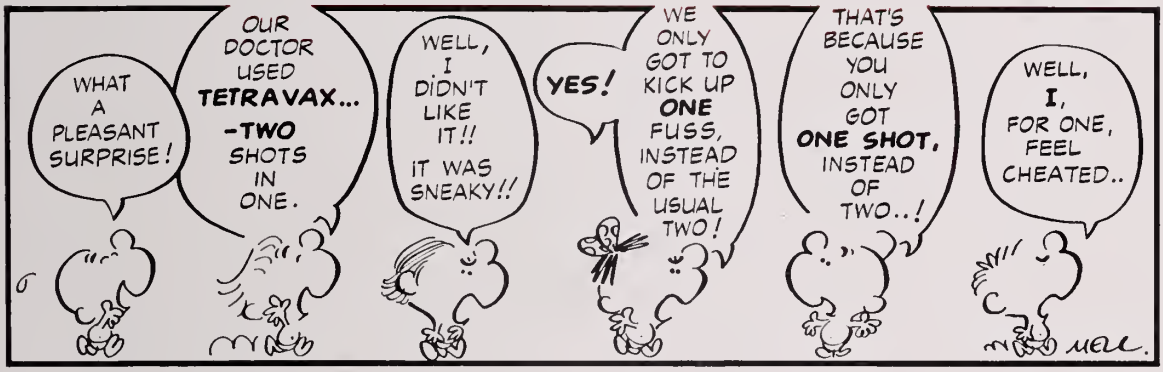
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The Editor acknowledges the receipt of the following books and thanks the publishers for sending them. Unfortunately, not every volume received is reviewed either because of lack of space or because the person to whom the book is assigned fails us. Whether reviewed or not, the books are appreciated and are available at the Library.

THE TREATMENT OF BURNS by Curtis P. Artz, M.D. and Eric Reiss, M.D. W. B. Saunders Co., Phil., 1957. $7.50.

A COOKBOOK FOR DIABETICS. Recipes from the ADA FORECAST by Maude Behrman. Edited by Leonard Louis Levinson. American Diabetes Association, Inc., N. Y., 1959. $1.00 from 1-9 copies; less for larger numbers.

LOVE, SKILL AND MYSTERY by Theodor Bovet. Doubleday & Co., Inc., Garden City, N. Y., 1958. $3.50.

OBSERVATIONS ON DIRECT ANALYSIS. The Therapeutic Technique of Dr. John N. Rosen by Morris W. Brody, M.D. Vantage Press, N. Y. $2.95.

CIBA FOUNDATION SYMPOSIUM ON THE KIDNEY arranged jointly with the Renal Association. Editor of the Renal Association, A. A. G. Lewis. Editor for the Ciba Foundation, G. E. W. Wolstenholme assisted by Joan Etherington. Little, Brown & Co., Bost., 1954. $6.00.

CHRONIC ILLNESS IN THE UNITED STATES. Vol. II. Care of the Long-term Patient. Commission on Chronic Illness. Published for the Commonwealth Fund by Harvard University Press, Cambridge, 1956. $8.50.

INTRODUCTION TO ANESTHESIA. The Principles of Safe Practice by Robert D. Dripps, M.D., James E. Eckenhoff, M.D. & Leroy D. Vandam, M.D. W. B. Saunders Co., Phil., 1957. $4.75.

THE OFFICE ASSISTANT IN MEDICAL OR DENTAL PRACTICE by Portia M. Frederick & Carol Towner. W. B. Saunders Co., Phil., 1956. $4.75.

DISEASES OF THE BREAST by C. D. Haagensen, M.D. W. B. Saunders Co., Phil., 1956. $16.00.

TABULATING EQUIPMENT AND ARMY MEDICAL STATISTICS by Albert G. Love, Eugene L. Hamilton & Ida L. Hellman. Office of the Surgeon General, Department of the Army. Wash., 1958. $2.00.

COLD INJURY, GROUND TYPE IN WORLD WAR II by Colonel Tom F. Whayne & Michael E. DeBakey. Medical Department, United States Army. Office of the Surgeon General, Wash., 1958. $6.25.

PREVENTIVE MEDICINE IN WORLD WAR II. Vol. IV. Communicable Diseases Transmitted Chiefly through Respiratory and Alimentary Tracts. Medical Department, United States Army. Office of the Surgeon General, Wash., 1958. $5.50.

SURGERY IN WORLD WAR II. General Surgery. Medical Department, United States Army. Office of the Surgeon General, Wash., 1955. $4.25.

SURGERY IN WORLD WAR II. Orthopedic Surgery in the European Theater of Operations. Medical Department, United States Army. Office of the Surgeon General, Wash., 1956. $4.00.

501 QUESTIONS AND ANSWERS IN ANATOMY by Stanley D. Miroyiannis. With an introduction by Ernest V. Enzmann. Vantage Press, N. Y., 1959. $5.00.

MEDICAL ELECTRICAL EQUIPMENT. Principles, Installation, Operation and Maintenance of Electrical Equipment used in Hospitals and Clinics. Advisory Editor: Robert E. Molloy. Philosophical Library, Inc., N. Y., 1958. $15.00.

MODERN CLINICAL PSYCHIATRY by Arthur P. Noyes, M.D. & Lawrence C. Kolb, M.D. 5th ed. W. B. Saunders Co., Phil., 1958. $8.00.

I PRESCRIBE LAUGHTER by Thomas Richard Rees. Vantage Press, Inc., N. Y., 1960. $2.75.

THE POWER OF SEXUAL SURRENDER by Marie N. Robinson, M.D. Doubleday & Co., Inc., Garden City, N. Y., 1959. $4.50.

SCHIZOPHRENIA by Manfred Sakel, M.D. Philosophical Library, Inc., N. Y., 1958. $5.00.

CURRENT MEDICAL REFERENCES. Edited by Paul J. Sanazaro, M.D. Lange Medical Publications, Los Altos, Calif., 1959. $3.50.

DOCTOR STRAND by Boris Sokoloff, M.D. Vantage Press, Inc., N. Y., 1960. $3.50.

A PRACTICAL GUIDE FOR GENERAL SURGICAL MANAGEMENT by Julian A. Sterling, M.D. Vantage Press, Inc., N. Y., 1960. $3.00.

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BOOK REVIEWS

FUNDAMENTALS OF CHEST ROENTGENOLOGY. By Benjamin Felson, M.D. W. B. Saunders Company, Phil., 1960. $10.00.

The old-fashioned vogue for subtitles has declined in recent years, but it might well be revived for this book. The subtitle could be—"with reference to the lung fields only." The chest contains many things besides lungs, but cardiac, vascular, gastrointestinal and bone structures are mentioned only as they may cause changes in the appearance of the lung fields. Cardiac roentgenology and particularly angiocardiography is a large enough subject by itself to warrant books in its own right. In spite of the restrictions it takes 300 pages to cover the subject of the lungs alone.

The word "Fundamentals" is used in the title and fundamentals of interpretation are stressed throughout. Details of technique are absent or merely mentioned in passing. Don't look here for "How to Do" a bronchogram. Interpretation, however, is exhaustively covered; particularly in terms of general pathological conditions rather than specific etiological diagnoses. The inclusion of 450 illustrations in 300 pages gives a good indication of the supplementing of text with illustrative examples. The cuts are excellent, and actually show what the caption says they show (not all published cuts do, you know).

In the introduction, the author says that the book is intended for cover-to-cover reading and subsequently as an unobtrusive consultant. If by unobtrusive, he means to imply surreptitious, I would disagree. Neither the author nor the reader should be embarrassed to have the book used freely. Any physician,—surgeon, internist, bronchoscopist or roentgenologist—interested in pulmonary conditions could profit by owning and reading this book.

A bibliography of 326 references provide sources for further study, if desired. Numbered references are scattered through the test.

It is my misfortune that reviewers are not given the books that they review. I've just got to go out and buy this one for my office library.

PHILIP BATCHELDER, M.D.

CLINICAL MANAGEMENT OF BEHAVIOR DISORDERS IN CHILDREN by Harry Bakwin, M.D., and Ruth Morris Bakwin, M.D. 2d ed. W. B. Saunders Co., Phil., 1960. $11.00.

While the text of this book may tend to indicate to the reader a limited area of interest nothing could be further from the authors' intent and accomplishment.

There are twelve parts in this second edition, each with concise descriptions of the problems discussed and up-to-date references. These twelve sections include growth and development, psychologic care, care of the physically ill and handicapped child, etiologic factors, diagnosis and treatment of behavior disorders in children, problems related to mental functioning, abnormalities, emotional development, habit and training, organic illness and antisocial behavior. Specific syndromes like schizophrenia, infantile autism and hysteria are presented.

It is the sections dealing with behavior disorders that are most enlightening. In these areas the authors excel in clinical description and definitive modes of therapy. In areas relating to mental function where our knowledge is still limited the authors are more objective. The problems of the grade school child, the child with special talents, with superior intelligence, with inferior intelligence and disturbances in speech, difficulties in reading, writing and arithmetic and eneuresis are comprehensively documented with multiple authoritative opinions, each very well taken, but leave the reader in midstream without a solution to the problem. For this reason, particularly where sundry solutions and sundry authors are quoted, the information is less helpful.

The text is a must addition for any professional treating children. This is especially true now that organic disease is being conquered and we have more time to devote to the psychological problems of childhood.

BETTY BURKHARDT MATHIEU, M.D.

ON THE MEDICAL LIBRARY BOOKSHELVES

concluded from page 84

THE PLASMA PROTEINS. Clinical significance by Paul G. Weil, M.D. Repr. from Amer. Pract. & Digest Treat., Sept. 1958. J. B. Lippincott Co., Phil., 1959. $3.50.

THE SEDIMENTATION RATE OF HUMAN EYTHROCYTES. Its Basic Concepts by Frank Wright, M.D. Vantage Press, Inc., N.Y., 1958.

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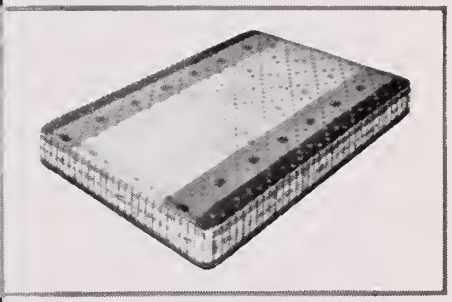
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1. Hock, C. W.: Treatment of Gastrointestinal Disorders with an Anticholinergic Tranquilizer Combination, J. M. A. Georgia 48:218 (May) 1959. 2. Investigators' Clinical Reports: Analysis of reports by 117 physicians in 500 patients. 3. Borowsky, H.; Schwartz, S. A., and Lister, J.: Experience with Short-Term Intensive Anticholinergic Therapy of Peptic Ulcer, Am. J. Gastroenterol. 27:156 (Feb.) 1957.

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The RHODE ISLAND MEDICAL JOURNAL

VOL. XLIV FEBRUARY, 1961 NO. 2

TREATMENT OF RESPIRATORY DISTRESS OF THE NEWBORN WITH HUMAN FIBRINOLYSIN*

(A Preliminary Report)

HERBERT EBNER, M.D.; GERALD SOLOMONS, M.D., AND H. J. MACMILLAN, M.D.

The Authors. *Herbert Ebner, M.D., Chief, Department of Anesthesia; Gerald Solomons, M.D., Assistant Pediatrician; H. J. MacMillan, M.D., Staff Anesthetist, Providence Lying-In Hospital.*

IT IS ESTIMATED that 25,000 deaths are caused by hyaline membrane disease each year in the United States.[1] This condition is most prevalent among premature infants, those delivered by Caesarean section, and those born of diabetic mothers. It does, however, also occur in term infants, but hyaline membranes have not been demonstrated in the stillborn. Clinically, the most characteristic feature is a gradual onset of respiratory embarrassment. The infant may or may not be apneic at birth, but most frequently, on cursory examination, the respiratory response does not seem unusual. Within a matter of minutes, or at most hours, the clinical picture becomes well defined; it is one of progressive lower respiratory tract obstruction. The infant exhibits subcostal, and then intercostal retraction; the alae nasi are active; and the dyspneic newborn works desperately to ventilate its lungs. In rapid sequence it undergoes "cyanotic spells," which consist of apneic periods of a minute or more. Eventually, one of these attacks proves fatal, and the infant usually dies within twelve to forty-eight hours after birth. At some stage of the disease process, a typical reticulo-granular pattern of increased density has been described in the lung fields by X ray.[2] At autopsy, the lungs are found to be bulky, and have the consistency of liver. Microscopy reveals areas of atelectasis with intense congestion of the pulmonary capillaries. The alveoli are lined with an eosinophilic condensed transudate, the hyaline membrane.

From the departments of Anesthesiology and Pediatrics, Providence Lying-In Hospital.

*This work was supported in part by a grant from the Wyeth Laboratories, Inc. The fibrinolysin used in this study was supplied as Actase Fibrinolysin (human) by the Ortho Pharmaceutical Corporation, Raritan, New Jersey.

Many theories have been advanced to explain the presence of the hyaline membrane, and a great deal of investigation has been done on the subject. It is not pertinent to this discussion to elaborate on them, but from these investigations certain incontrovertible facts emerge. First, Gitlin and Craig[3] using fluorescent labeled antibody studies, have demonstrated that the membrane has a basic fibrin composition that resembles blood clot. Second, altered pulmonary hemodynamics at birth are responsible for the transudation of fibrinogen across the capillary wall. This fibrinogen is a product of the infant's own capillary transudate from alveolar-capillary leakage. It is acted on by thromboplastin and converted into fibrin. This fibrin is deposited in the alveoli. Third, in some infants, due to a deficiency of fibrinolytic enzymes, this fibrin is not liquefied and removed, and the end result is hyaline membrane formation.[1] This is of course an over-simplification of a complex process, but suffices for the purpose of this discussion. There are several prominent investigators who believe that the hyaline membranes are not related to the respiratory distress. Gruenwald[4] believes that the primary disorder is atelectasis, and that the membranes are "eosinophilic red herrings." Craig[5] in a series of brilliant *in vitro* experiments has, however, demonstrated that these membranes are primarily in those alveoli which are connected with the terminal bronchioles, and that they do not appear in the atelectatic areas. They must act in part as a definite barrier to the ventilation of the more peripheral alveoli, as well as interfere with diffusion of oxygen and carbon dioxide within the air-containing proximal alveoli which still communicate freely with the bronchi. This dovetails with the clinical picture of lower respiratory tract obstruction seen in this syndrome. Having established the composition and importance of the membranes, Craig[6] demonstrated that fibrinolysin induced into the lung of a premature infant who died with hyaline membrane disease caused dissolution of the hyaline membrane *in vitro*. These experiments

continued on next page

suggested a method of treatment for infants with the so-called respiratory distress syndrome.

Methods and Materials

Prior to our use of human fibrinolysin in infants, a series of guinea pig experiments was performed. These are to be reported in greater detail elsewhere. It is a fact that certain experimental animals subjected to high oxygen concentrations demonstrate the pathologic pulmonary conditions of edema, atelectasis, and hyaline membrane formation which closely resemble the respiratory distress syndrome of the newborn. Accordingly, sixty-three guinea pigs (Fig. 2) averaging 350 grams, were exposed to 85 per cent to 90 per cent oxygen for from 60 to

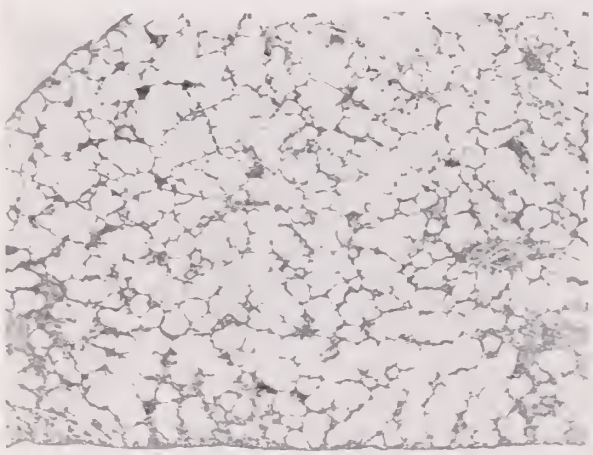


FIGURE 2
Normal Guinea Pig lung. X 50

82 hours. These animals uniformly became seriously dyspneic in forty hours, developed hyperpnea, with alternate periods of apnea by fifty hours, and finally expired in sixty to eighty-two hours. At autopsy, pulmonary edema with congestion and increased lung weights was demonstrated, and histologically there was a mixture of edema, congestion and hyaline membrane formation (Figs. 3, 4, 5). Twenty-four animals were thus treated and sacrificed at various intervals to study the course of oxygen toxicity. Thirty-four animals were subjected to an hyperoxic atmosphere, and prior to the last stages of the disease, given nebulized human fibrinolysin (Actase)® into the closed treatment chambers. Four of these died within two hours of the beginning of the treatment; the remainder were sacrificed at various stages of the disease and the recovery period. The Actase® solution was diluted to contain 50,000 units per 200 ml. of distilled water. This was delivered into the nebulizer over a two- to six-hour period. It seems significant that none of the guinea pigs so treated died spontaneously with the disease, except in four cases where there was insufficient time to complete the Actase® treatment.

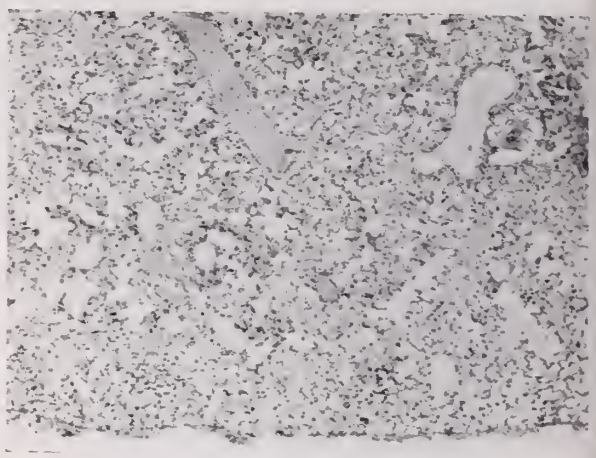


FIGURE 3
Guinea Pig lung after 60 hours of oxygen poisoning. There is edema, congestion and early hyaline like membrane formation.

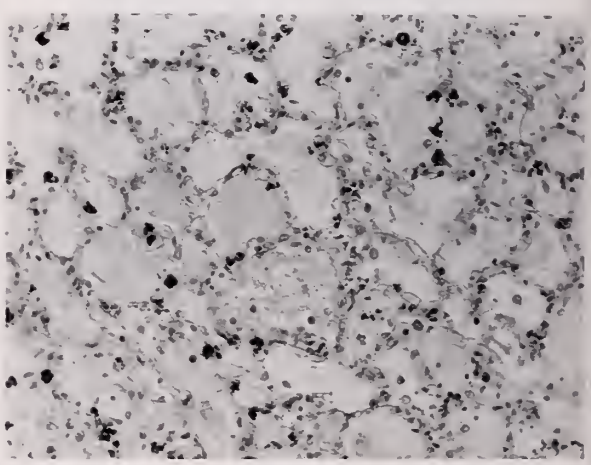


FIGURE 4
Guinea Pig lung after 70 hours of oxygen poisoning. There is marked pulmonary edema; the alveoli being filled with the transudate from the alveolar capillaries many of which have swollen and ruptured the membranes. There is hemorrhage into many alveoli and marked congestion of the alveolar capillaries. The pigment particles are india ink particles which were mixed with the amniotic fluid aspirate prior to oxygen poisoning. X 200

Four animals were used as untreated controls (A, Fig. 1); four were given excessive dosage with nebulized Actase® and showed no untoward effect (Fig. 6). A fair indication of the success of the treatment used is also indicated by a tabulation of the autopsied lung weights of the animals (Fig. 1). The average lung weight of the animal suffering from oxygen poisoning increased with the duration of the disease up to eighty-two hours, at which time all pigs died without treatment. The animals treated with Actase® actually have lungs that weigh more (are more edematous), but this is interpreted as progress of the disease beyond that of the untreated. With the Actase® therapy they are able to survive the oxygen poisoning, and show only residual

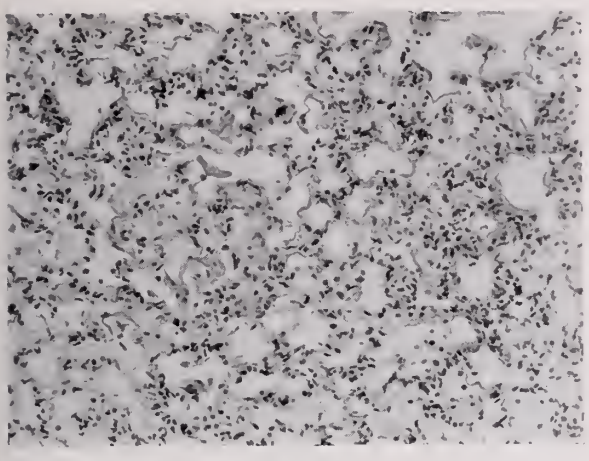


FIGURE 5

Guinea Pig lung after 80 hours of oxygen poisoning. Hyaline like membranes partially line many alveoli; there is moderate atelectasis throughout with thickening of the alveolar septae. X 150

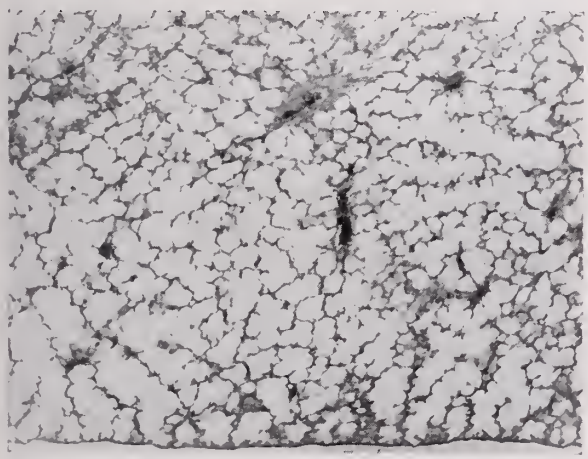


FIGURE 6

Guinea Pig lung treated with 100,000 F. U. of human fibrinolysin sacrificed 48 hours later showing minimal histologic changes as compared to normal untreated lung. X 50

effects of the disease, ten to eighteen days later (Figs. 7, 8, 9). A moderate amount of pulmonary congestion in the four animals treated with Actase® alone can be seen in the small increase in lung weights of these animals (B, Fig. 1). The principal features of the histologic examination were vascular congestion, atelectasis, membrane formation, edema, and pneumonia. No untoward effects of hemorrhage, proteolysis, or edema, which could be ascribed to the use of Actase® alone, was observed. On the other hand, the lungs of the diseased animals treated with Actase,® showed early increased aeration (Figs. 7, 8, 9). Hyaline membrane formation in the guinea pigs is not uniform; therefore it is difficult to state that there was complete and definite resorption of the membranes in this small series of animals. The increased weight of the lungs of Actase® treated animals was associated with the earlier development of patchy pneumonia. Again, this is interpreted as survival of the animals to a later stage in the natural life history of the disease. Four animals were given nebulized water (mist) as controls. It was concluded that Actase® was nontoxic for the experimental animals in the concentrations used.

Prior to using Actase® on infants suffering from respiratory distress, the following experiment was carried out to assess the toxicity of this drug on the human organism. Fifty newborns were scratch-tested with 1:100,000 dilution of fibrinolysin, in water, saline being used as a control. The tests were read after twenty minutes and twenty-four hours. In addition, five premature infants, all under five pounds in weight, were given intradermal injection of 0.1 cc of 1:100,000 dilution of fibrinolysin, with saline as a control. Readings were taken after twenty-four and ninety-six hours. All tests were completely negative and no evidence of allergic reaction to fibrinolysin was found in this series. Accordingly, Actase® was nebulized into the incubators of infants suffering with respiratory distress.

Case Reports

Case 1. A 4-lb., 2-oz. (1.87 kg.) male infant was born to a twenty-six-year-old gravida 3, para 2. After 55 minutes of tumultuous labor, during which she received 0.2 gm. of secobarbital sodium (Seconal®) and 25 mgm. of promazine (Sparine®), she received five minutes of cyclopropane anesthesia for delivery. The infant cried immediately but remained cyanotic. In the premature nursery the infant was treated with mistogen and oxygen, ascorbic acid, digitalis and vitamin K. X-ray examination at eighteen hours showed increased markings in both lungs which appeared to be due to disseminated atelectasis. A total of 100,000 units of Actase® was nebulized in air during the last twenty hours of life. In this case, inasmuch as there seemed to be excessive mucus production, 10,000 units of Actase® in 4 ml. saline was injected intratracheally during a five-minute period. Clinically,

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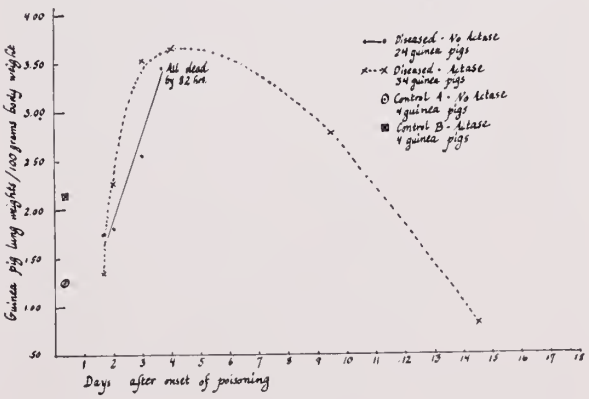


FIGURE 1

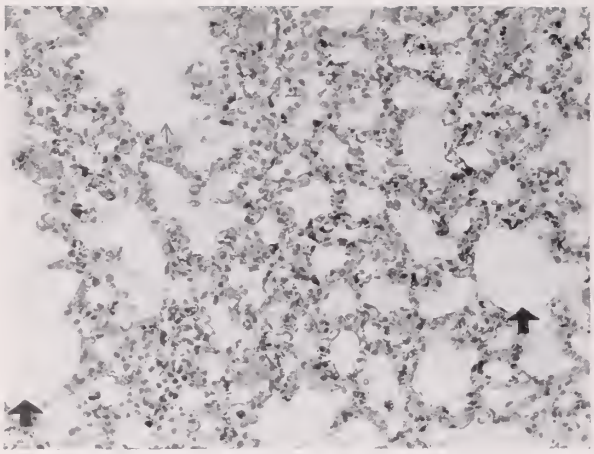


FIGURE 7

Guinea Pig lung with oxygen poisoning and early hyaline like membrane formation treated with human fibrinolysin nebulized into treatment chambers (50,000 F. U.). Shows beginning aeration of the lung, (note aerated terminal bronchioles — arrows).



FIGURE 8

Guinea Pig lung after fibrinolysin treatment and recovery from the hyaline like membrane disease, eight days later showing almost completely cleared lung airway. X 50

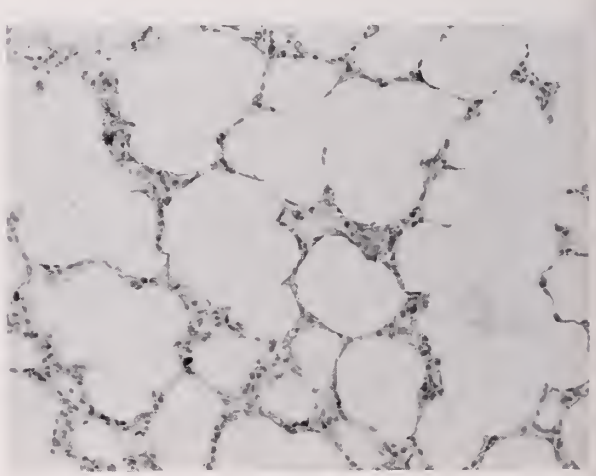


FIGURE 9

Guinea Pig lung almost completely cleared of hyaline like membrane disease with human fibrinolysin treatment at ten days after treatment. Only slight thickening of the alveolar membrane remains. X 250

the patient did not improve, but the serum potassium levels dropped from 8.5 mEq/1 at 18 hours to 5.3 mEq/1 twelve hours later and twelve hours before death. Autopsy examination of the lungs showed pulmonary congestion, and scattered atelectatic area, and prematurity (34½ weeks).

From this case, it was concluded that the Actase® has no untoward effect when nebulized into the lungs with air, or when injected directly intratracheally.

Case 2. An 8-lb., 11-oz. (3.93 kg.) male infant was born to a thirty-three-year-old gravida 3, para 2. There had been one episode of false labor six days previously. The mother was blood type A Rh negative, but without demonstrable Anti Rh titre. Although the dates were uncertain, the patient appeared to be at term at delivery. She was in labor a total of seven hours and seven minutes; analgesic medication was 0.3 gm. of secobarbital (Seconal®) and 175 mgm. of meperidine (Demerol®). Anesthesia was with approximately eight minutes of cyclopropane before delivery. The infant was quite cyanotic at birth. Resuscitation was performed with intermittent endotracheal oxygen insufflation for twenty-two minutes. The infant also received 0.2 mgm. of nalorphine (Nalline®) given intramuscularly, without any effect. Further medications consisted of 1,200,000 units of penicillin; 985 mgm. of streptomycin; 25 mgm. of ascorbic acid; and 1.0 mgm. of Synkamin.® The baby was kept in mistogen with oxygen concentrations of 30 per cent to 40 per cent. X-ray examination of the lungs at nine hours of life showed normal heart and poor aeration of both lungs with bilateral disseminated atelectasis. There was a suggestion of hyaline-like membrane disease in the right lower lobe. The first treatment was 50,000 units of Actase® in 200 ml. of sterile water nebulized by air into the semi-closed incubator over an eight-hour period. This was repeated at thirty hours of age, using 50,000 fibrinolytic units over a twelve-hour period. X rays taken at forty-eight hours of age showed improved aeration of both lungs with some degree of residual bilateral disseminated atelectasis. A third course of Actase® was given at seventy-two hours. X rays at this time revealed great improvement in the aeration of both lungs, which now appeared fully expanded and clear. The chest was essentially negative at three days of age. The infant was discharged from the hospital on the tenth day, weighing 8 lbs., 7 oz. (3.82 kg.). Subsequent development is said to be normal.

Case 3. A 5-lb. (2.26 kg.) female child was born to a nineteen-year-old primigravida after five hours of labor, during which she received 175 mgm. of meperidine (Demerol®), 1.07 mgm. of scopolamine and 0.3 gm. of secobarbital (Seconal®). She received saddle block anesthesia for the spontaneous delivery. The infant was 43 weeks gestation by dates. The fetal heart was 130 during labor, but dropped to 114, then to 84 just prior to delivery. The infant was apneic at birth. Resuscitation was accomplished by endotracheal insufflation with intermittent positive pressure oxygen for thirty-five minutes. X rays taken at this time showed a questionable reticulo-granular pattern suggestive of hyaline membrane disease. The infant made its first spontaneous respiratory effort at fifty minutes after delivery. This was followed by a feeble cry and the infant remained cyanotic. In the premature nursery, the child was treated with mist and oxygen in a semi-closed incubator and Actase® was added with air nebulization at the rate of 6,000 units per hour for twenty-eight hours continuously. There appeared to be rapid clinical improvement and X rays taken at this time bore out this impression. Additional therapy included streptomycin and ascorbic acid. The electrocardiogram was normal, except for slight right ventricular preponderance. The infant was sent home on the twenty-first day weighing 6 lbs. (2.72 kg.). Final X rays showed normal lung patterns.

Case 4. A 4-lb., 15-oz. (2.24 kg.) female infant was born to a twenty-nine-year-old gravida 7, para 2, by Caesarean section for abruptio placenta, at thirty-five weeks of gestation. She was given spinal anesthesia, and premedication of pentobarbital (Nembutal®) 0.1 gm. and scopolamine 0.43 mgm. She was Rh negative blood type without titre. The baby cried immediately but suffered secondary apnea for five minutes. There was prompt response to intermittent positive pressure oxygen in about thirty seconds. At two hours of age the infant began to manifest respiratory distress with an expiratory grunt and sternal retraction. Cyanosis was evident even in oxygen concentrations of 35 per cent to 40 per cent. X ray at six hours of age showed granular infiltration throughout both lung fields consistent with hyaline membrane disease. The heart and thymus were normal. Actase® treatment was started at seven hours of age using 25,000 fibrinolytic units dissolved in 200 cc of sterile water nebulized continuously with air into the incubator for the next eighty-eight hours of life. This totaled 400,000 units by the fourth day. X rays taken at the end of thirty-six hours of treatment still showed the granular appearance characteristic of hyaline membrane disease and also an increase in the heart size. Although the infant was markedly dyspneic at this time, improvement had been noted in the electrolytic pattern. At twenty hours of age the potassium was 7.0 mEq/l and the sodium, 133 mEq/l, and at forty-eight hours of age, potassium was normal (5.0 mEq/l) and the sodium, 137 mEq/l. On the fifth day of life Actase® therapy was discontinued at which time the infant appeared much improved. X ray at this time showed normal aeration of the lungs. The electrocardiogram at forty hours showed prolonged Q T intervals and no evidence of hyperkalemia. The infant had a negative direct Coombs, but reached a high bilirubin of 13.2 mgm. per cent at the end of the first week of life. However, she continued to improve so that she was discharged weighing 5 lbs., 8 oz. (2.59 kg.) on the thirty-fourth day of life. Subsequent history showed that the infant was normal and without symptoms, except for a mild feeding problem.

Discussion

Until the basic physiologic aberrations are more thoroughly understood, treatment has of necessity been only supportive and for the most part empiric. The importance of early adequate ventilation of the newborn cannot be over-emphasized. Supplemental oxygen in concentrations of 25 per cent to 30 per cent is required to reduce the neonatal mortality and morbidity due to hypoxia. The oxygen concentrations must be periodically checked with a reliable oximeter. Feedings are withheld to obviate the possibility of aspiration. Digitalization is instituted as indicated by a failing heart. Neonatal metabolic and respiratory acidosis and hyperkalemia are treated by solutions of glucose, bicarbonate and insulin as recommended by Usher.[7] Antibiotic therapy may be instituted if infection supervenes.

As yet, no definite criteria exist for the clinical diagnosis of the respiratory distress syndrome. There is, however, agreement that a fairly strong presumptive diagnosis at least can be made during life, and that such a diagnosis can be corroborated at autopsy should the infant die. Certain additional values must, however, be accurately measured and evaluated before any great improvement in therapy can be achieved. The chemical status of infants who have, or are likely to develop the respiratory distress syndrome must be further investigated. Respiratory and circulatory functions cannot be separated. There is evidence which suggests that the ductus arteriosus normally remains open for several hours after birth.[8] It has also been demonstrated that the response of the neonate to hypoxia is a fall in peripheral arterial pressure below the pulmonary pressure, so that blood from the right heart would short-circuit the lungs via this patent ductus arteriosus.[9] This would re-establish, in effect, a "fetal circulation," which would contribute to the recur-

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THE B.M.R. OF YOUR ASSOCIATION*

IRVING A. BECK, M.D.

The Author. *Irving A. Beck, M.D., President, 1960, the Providence Medical Association.*

A MEDICAL ORGANIZATION, like any other group, be it scientific, social, or business, must periodically take stock and through its officers report thereon to its membership. As we have just heard, this may take the form of a financial report—so much received, so much spent; a secretarial report as to how many new members were added, how many lost; the number of meetings, and their respective attendance. These, and others, are the necessary details incident upon the functioning of a medical association. Are they, however, the true measures of our activities? In this annual report, I propose briefly to review some of our principal functions that justify our existence as an entity.

We elect the largest delegation to the House of Delegates of the Rhode Island Medical Society, and there our representatives determine and implement policies, participate in the invaluable committee work, and co-operate with other organizations in the general field of health and welfare. In a compact, largely urbanized state such as ours, many of the duties carried on in other areas by the county medical society are here more efficiently handled at the state level. Therefore, this association does not *per se* have many active committees, but our membership is very well represented on those of the state Society.

An important function is the monthly scientific program, which we should judge perhaps rather by the calibre of the speakers than by the attendance, which unfortunately has frequently not been commensurate. Perhaps some later president will tackle the problem of increasing the number of the "faithful regulars."

Two years ago in his Annual Address, Doctor Joseph McWilliams reviewed the work of our Medical Bureau, which provides a service not only to physicians and their patients, but to the community as well.

The screening of applicants for membership acts as a check upon their having satisfactorily completed the requirements for medical practice in this state, and helps maintain the quality of hospital staffs, as membership is usually a prerequisite to staff appointments.

One other activity offers a parameter by which our association may be rated.

"As the calorimeter tells the activity of the patient's metabolism, so you may determine the plus or minus activity of the local profession in any district by the condition of its library." So stated Harvey Cushing in 1926.[1] If we accept this as a possible standard, what would be the rate of the Providence Medical Association? The assemblage of books and periodicals housed in this building is properly termed the library of the Rhode Island Medical Society rather than of the Providence Medical Association. But there is an unique historical and current intertwining of the funds and volumes of the Providence Medical Association with its parent library, so that it must be regarded as a joint effort.

I shall not review in detail the history of the Library, fascinating and inspirational though it is. This was done and published by Doctor George Hersey in 1900,[2] to whom the Library owes its greatest debt; by Doctor G. A. Blumer in 1911;[3] its treasures were itemized by Doctor H. G. Partridge in 1924;[4] and Doctor John E. Donley, whose memory is still fresh, brought the record up to date in 1937.[6] I am sure that the forthcoming sesquicentennial history of the Rhode Island Medical Society will detail its beginnings, its travels, and its travails until its secure lodgement on these premises.

To quote from Doctor Hersey's scholarly address:

"The library of (the Rhode Island Medical) Society is the fruit of an early planting, for at the first election of officers in 1812, the Society chose a librarian. It is not probable that he had a hard time caring for books as he made no annual report, and asked for no appropriation, and as the office involved no duties, it was finally discontinued.

"The Providence Medical Association was organized in 1848, and about 1850 began taking the leading English and American medical journals. These long files of important periodicals, covering half a century, (now, of course, 110 years) have all

*Presidential Address delivered at the 114th Annual Meeting of the Providence Medical Association, at the Rhode Island Medical Society Library, January 2, 1961.

been incorporated in our library.... The Providence Medical Journal (published by this association) was conceived in the hope of benefiting the Medical Library, as all journals received and exchanged and all books in review were placed on our shelves and preserved for future reference." This also happens to be one of the principal side-benefits of our own Rhode Island Medical Journal at this time.

In 1880, the Providence Medical Association presented its "books, pamphlets, and medical journals" to the Rhode Island Medical Society and here began the union which has persisted until the present.

In 1911, on the occasion of the laying of the cornerstone of this building, Doctor Frank L. Day[5] stated, "The most marked feature of the library is the extraordinary number of bound volumes of the world's medical journals, often comprising complete sets. Many files of these journals have been contributed by the Providence Medical Association, which since its organization in 1848, has subscribed for the prominent, current medical journals, both American and foreign, and has deposited them in the library." This "most marked feature" has continued to be the responsibility of the Providence Medical Association to this day. Our association makes a substantial annual contribution to the Library for the purchase and binding of periodicals, and appropriates a sum for the use of the premises of the Rhode Island Medical Society as its meeting place—a practice dating back exactly one century, when the two groups shared the rooms of the Franklin Society on North Main Street.

A Committee on the Reading Room of the Providence Medical Association was appointed in 1877, and constituted annually until 1956, when its functions were consolidated with those of the State Society Library Committee.

One medico-literary mystery exists in the history of our library. In 1868, the "pathologic specimens, Books, and Pamphlets belonging to the Providence Medical Association" were presented to the Rhode Island Hospital, as were also those of the Rhode Island Medical Society. In 1880, the secretary of the association requested the trustees of the Rhode Island Hospital to return the journals, but no record exists, either of our own or that of the Rhode Island Hospital, as to whether they were. It is known that about 1930, there was a literary housecleaning at the Rhode Island Hospital, and except for some rare items salvaged by members of the medical staff, many old books and journals, presumably part of the above loan, were disposed of. Parenthetically, should any of those discriminating physicians who literally plucked these brands from the burning be present, may I express a plea for their eventual return—80 years after the original request—to this library. I can assure them that adequate recognition of their interim custodianship will be made. The mystery is that somehow the invaluable files of the periodicals—some subscribed to since the inception of the Society, such as the British Lancet, which dates from 1823—are intact. Did Doctor Hersey somehow get the periodicals back, or did he in some manner manage to fill in the missing issues? Considering the magnitude of the latter task, I suspect that he probably personally retrieved them, and this is why no formal record exists.

In evaluating the role of our library today, and through it our corporate metabolism, we cannot substitute the achievements of our predecessors.

"It is to be regretted that so few of the profession frequent the reading room. How to make the room more useful to physicians of Providence is a problem we would gladly solve.... Suggestions will be thankfully received." So wrote Doctor Hersey in 1880. Doctor Donley[6] quoted the observation that a library is a mausoleum, where knowledge lies dead and mummified unless its contents are circulated.

Can these criticisms be made of our library today? Let me inform you of the current functions of our Medical Library. It is still a delightful place to browse through journal, text, and per chance even fiction by some literary medico in the Davenport collection, but an adjustment to the tempo of the jet age has been made. Physicians, for many reasons, find it increasingly difficult to come to the library in person. Yet the need for consultation with the medical literature is on the increase. This and the frequent inability to find a nearby and legal place to park one's car, have resulted in the novel practice of the books going to the physician rather than vice versa. Through the initiative of our librarian, references on a subject of interest to a member are assembled, and the volumes may be withdrawn for leisurely study and abstraction in the home or office. Our library staff is generous with its renewals, and most gentle with its reminders to each of us delinquents—even though fines have been authorized for the past century. Of course, there is a limit to the extramural exile. By direct arrangement, volumes may be picked up and returned at other than the regular hours, and they may be even forwarded by mail. This then is a direct service to our members, and in 1959, some 221 bibliographies were prepared.

To the medical and scientific community generally, the library renders still another service. There are many libraries with material in the medical sciences in this area. There are those of the various hospitals and those of the state departments. The universities and colleges have large collections, particularly in the fundamental sciences,

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as does the Providence Public Library. Obviously, some material is duplicated, but often one of these libraries possesses periodicals or texts not present in another. To meet this situation, there was initiated in 1953 a Union List of Medical Journals. This project originated with the several librarians themselves, and at the present time comprises the periodical inventory of twenty libraries in this community. A patron of any of these libraries may, through the interlibrary loan service, have access to the local pooled wealth of medical literature. Needless to say, our library through its librarian was one of the leaders in this community project, and because of its much greater collection is the major contributor. During 1959, 548 journals and 59 books were loaned to other libraries in New England.

The lay press abounds with references to the selfishness of physicians. Does the public know that our library is constantly furnishing the public with directory-type material? Do they know that many college students, nurses, attorneys, members of other professions, and other interested individuals make constant use of our library facilities? That this category in 1959 numbered 1,015 individuals? If the general public were aware of these services and realized that all this is provided for out of your dues and the resources of our organizations, perhaps this type of attitude might improve.

What are the resources which provide these services? We have a building and stacks to house our volumes—bulging a bit it's true. We have a pleasant reading room—traditionally a responsibility of the Providence Medical Association. We have some 43,000 bound volumes, and one can only conjecture as to the amount still awaiting binding, and cataloguing. We subscribe to 430 periodicals. All these are the physical resources—but it takes more than paper and leather to perform the tasks I have listed.

"The testy librarian of tradition miserly of his treasures, impatient of interruption, is an extinct species." So wrote Harvey Cushing[1] in the paper from which I have taken my theme. I do not believe this type of librarian ever existed in this library. Our present librarian, Mrs. Helen DeJong, her predecessor, Miss Grace Dickerman, and the transient, but devoted assistants, have been the living machinery who have quietly and efficiently implemented the function above enumerated. To return to the dictum of Harvey Cushing,[1]—What then is the metabolic rate of this Association? If our support of the library and its tasks is any criterion, I feel we can justifiably conclude we are a hypermetabolic group.

References

[1]Cushing, Harvey: "The Doctor and his Books" (1926) in "Consecratio Medici" Boston 1940

[2]Hersey, G. D.: "The Medical Library as a Factor in Medical Progress" Tr. R.I.M. Soc. 6:162-170 1900

[3]Blumer, G. A.: "A Plea for the Medical Library" Tr. R.I. Med. Society 8: (part II) 139-150 1911

[4]Partridge, H. G.: "The Library of the R. I. Med. Society; Its Treasures" R.I. Med. J. 24:5-8 January, 1924

[5]Day, F. L.: "Introductory Address" Tr. R.I. Med. Society 8: (part II) 151-155 1911

[6]Donley, John E.: "The R. I. Medical Society Library, After Twenty-Five Years" R.I. Med. Jr. 20:105-110 July, 1937

Grateful acknowledgment is made to Mrs. Helen DeJong for her assistance in assembling much of the above data.

TREATMENT OF RESPIRATORY DISTRESS OF THE NEWBORN WITH HUMAN FIBRINOLYSIN

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ring cyanotic episodes witnessed in the respiratory distress syndrome. Infants who develop this syndrome appear to have low systemic blood pressures at birth, and more reliable techniques to measure this parameter must be developed. Close observation of neonates who eventually develop respiratory distress suggests that these infants work harder to ventilate their lungs than do the normal newborn, even prior to the full blown clinical picture. Intraesophageal pressure readings would provide us with an index of this energy expenditure early in the development of the disease process. It is our contention that neonatal blood pressure and intraesophageal pressure readings are the two most important values in early diagnosis and the early institution of therapy.

SUMMARY

1. The syndrome of hyaline membrane disease is described and its etiological factors discussed.

2. The production of a similar syndrome in the guinea pig is described and the attempted dissolution of the membrane with a specific enzyme fibrinolysin in this experimental animal and the infant with respiratory distress is reported.

3. Further investigation must be directed toward the circulatory system; and the value of blood pressure and intraesophageal determinations in the neonate as a guide to diagnosis and treatment is stressed.

References

[1]Lieberman, J.: Clinical Syndromes Associated with Deficient Lung Fibrinolytic Activity. 1. A New Concept of Hyaline Membrane Disease, New England J. Med. 260:619, 1959

[2]Peterson, H. G., and Pendleton, M. E.: Contrasting Roentgenographic Pulmonary Patterns of the Hyaline Membrane and Fetal Aspiration Syndromes, A.M. J. Roentgenol. 74:800, 1955

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THE PROBLEM OF UNEXPLAINED UPPER GASTROINTESTINAL BLEEDING*

ROMAN R. PE'ER, M.D.

The Author. *Roman R. Pe'er, M.D., of Tiberias, Israel. Head, Department of Surgery, Poriah Government Hospital, Tiberias, Israel. Surgeon-in-chief, pro tempore, Miriam Hospital, Providence, Rhode Island, September, 1960.*

GASTROINTESTINAL HEMORRHAGE is a catchall term, embracing a number of different diseases. Various causes and sources of bleeding demand different approaches and treatment. For instance, a hemorrhage from varicose veins of the esophagus has an entirely different background than bleeding peptic ulcer or erosive gastritis and will require a different treatment.

The causes of bleeding are many. I should like to go over them quickly, just to show their variety. The intragastric causes are: peptic ulcer, benign or malignant tumors, hemorrhagic gastritis, venous talengiectasia of the mucosa, hiatus hernia, ruptured sclerotic vessel or aneurysm, and trauma. The extragastric causes may be in the esophagus, such as varicose veins, diverticula, erosions or esophagitis and foreign bodies; or in the duodenum or small intestine, such as ulcers, tumors, erosions and diverticula. There are also causes completely unconnected with the gastrointestinal tract, such as thrombocytopenic purpura, hemophilia, and vitamin K deficiency.

The degree of bleeding may be roughly classified as *massive,* and *recurrent, nonprofuse* hemorrhage. Esophageal and gastric varices account for 10% of cases of massive hemorrhage, while peptic ulcers claim a lion's share, about 80%. All other causes, such as gastritis, esophagitis, hiatus hernia, and blood diseases between them account for the remaining 10% of the bleeding patients.

I should like to exclude from this discussion all patients with liver cirrhosis and chronic peptic ulcer because their condition and history, in most cases, is known in advance; and they can be treated on that basis. Let us concentrate on the remaining causes of hemorrhage, which are mostly unknown at the time when the patient is admitted to the hospital.

*Presented at a Regular Meeting of the Providence Medical Association at the Rhode Island Medical Society Library, Providence, Rhode Island, October 3, 1960.

Because of the serious condition of the bleeding patient, the usual routine examinations are not always permissible, and very often the surgeon is called for an emergency operation. Delay in making a decision, with constant or recurrent blood loss, lowers the patient's ability to withstand an inevitable major operation, while a prompt decision puts a surgeon in the position of having to work in the dark. If the patient with a known source of hemorrhage presents a multitude of difficulties, a patient with an obscure source of bleeding presents even more problems. These are the cases which tax our professional ability to the utmost, yet the results can be very disappointing, when we are unable to detect the source of bleeding, or to explain the cause.

Normally, when laparotomy and routine palpation of the abdominal contents fail to show the source of the bleeding, gastrotomy, with or without duodenotomy, is done. Constant irrigation of the mucosa is of great help in visualizing small erosions or a ruptured vessel. Careful attention is paid to the posterior wall of the stomach or duodenum because a gastric ulcer usually erodes into the left gastric artery and duodenal ulcer into pancreaticoduodenal artery. In that way, the hemorrhage which was obscure at the time of the patient's admission can be detected and dealt with.

But, strange as it may seem, it happens sometimes that a surgeon is unable to demonstrate any evident source of bleeding, even with a most careful and skillful examination. This situation has been reported many times from various hospitals and the term "obscure" or "unexplained" bleeding has been applied. Some surgeons have reported as many as 10% of all operated patients with massive hemorrhage in this group. Our percentage is somewhat smaller. I feel that the exact number doesn't matter, but rather recognition of the fact that such a situation does exist at all.

Taking into consideration that 70-80% of possible causes of bleeding are located in the stomach, purely from an anatomical point of view, subtotal gastric resection has been recommended. It has become more or less the accepted procedure since the publication by the Mayo Clinic in 1954 of satisfactory results with this operation.

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Nevertheless, the decision for resection is taken solely on empirical experience and not on a solid scientific basis.

What bothers me most in these cases is the uncertainty which follows such surgery. Very often we are forced to operate upon patients who present great operative risk, due to a number of extraneous factors. We face these risks cautiously because we know that operation is the only means of cure, and together with adequate pre- and post-operative treatment we have in this approach the best hope of saving the patient's life. However, confronted by the patient with obscure bleeding, we don't know for a very long time if our operation was a success or a failure; and with the best of post-operative treatment we can encounter recurrent hemorrhage. Thus we are faced with exactly the same calamity for which the patient was operated upon. Imagine how distressing it is for a surgeon to perform a major operation upon a severely ill patient without being able to tell if the operation was really adequate or not.

Besides the moral problem, we have before us a technical problem too, due to the fact that we are working in the dark. Our approach is based on the fact that the method has worked well in such and such number of cases and should, therefore, work well also in the case at hand. Yet the present case can be entirely different from the previous ones. We proceed on the strength of the French saying *on fait se qu'on peut* . . . , which means *we do what we can*, but this obviously not always is what should be done. However, till now we have nothing better, and in my humble opinion high gastric resection should continue as the best solution. Half measures will prove even more disappointing.

I still remember, some few years ago, Doctor John Garlock of Mount Sinai Hospital, then Visiting Surgeon in Israel, performing a laparotomy because of gastrointestinal bleeding of obscure origin. After careful examination of the stomach and duodenum, from the outside and inside, no source of bleeding was evident. He ligated all major vessels around the stomach. The patient did well for a couple of days, then succumbed to a second hemorrhage.

About a year later, I, myself, was faced with the problem of a fifty-year-old, obese woman, a new immigrant, brought straight from the ship to our hospital, with massive gastrointestinal bleeding. I too failed to demonstrate the source of bleeding, but remembering the previous case, did a subtotal gastrectomy and the patient recovered nicely. The ironic fact was that the pathologist failed to determine the cause of bleeding on the examination of the specimen, but the patient did well during a two-year follow-up.

Four months ago I was consulted in the case of a twelve-year-old girl with severe diarrhea and melena of a week's duration, for which she already had received ten blood transfusions (of half a liter each) and all possible medical treatment. At operation I found no blood in the duodenum or jejunum, but the lower part of the small intestine, as well as the colon, was full of blood. In the ileum I found a 20 cm.-long Meckel's diverticulum, which I excised. Three days later, in the middle of the night, the girl again had fresh bleeding which proved fatal. On post-mortem examination erosions of all the mucosa of the gastrointestinal tract were found. Could I save her by doing a gastrectomy in addition to resection of the diverticulum? I don't know.

While it is conceded that massive hemorrhage is a difficult problem to handle, its serious nature makes it easier for an internist to decide in favor of operation, and for a surgeon to perform it because there is no other choice. But recurrent, non-profuse bleeding, having nothing of the element of urgency, can lead to disastrous results if a prompt decision is not made. And here, it often happens that all available means of examination fail and, for all practical purposes, we are confronted in this group too with unexplained bleeding

In a recent statistical study of 300 patients with gastrointestinal bleeding, reported by the City Hospital of Cleveland, in thirty-three cases (or 10%), the source of hemorrhage remained obscure despite repeated examinations of the gastrointestinal tract. Our experience in Israel is about the same and we feel that if all other means fail, exploratory laparotomy must be performed as the last means of examination at our disposal.

Sometimes I feel that there is hesitation about laparotomy as a method of diagnosis. There are doctors who repeat the same examinations again and again, being afraid that referring the patient to a surgeon for exploratory laparotomy is a sign of diagnostic defeat, which obviously is not true. The time lost usually works against the patient. My belief is that after a second episode of bleeding, if a thorough roentgenological examination is of no help, the patient should be explored and the treatment decided upon on the basis of this exploration. I will better support my statement by reporting just one case history which may perhaps be of interest.

Case Report

This is the story of a thirty-four-year-old woman, the mother of three children and a teacher by profession. I mention her profession to emphasize the fact that we are dealing with an intelligent, educated person, one not expected to be a victim of her own negligence. She was healthy and working steadily until 1951, in which year she had a sudden attack of abdominal pain accompanied by tarry stools. A

year later, in 1952, she had a second attack of pain and melena. She was sent to a hospital, examined, and nothing was found. After a few days, the melena subsided, and she was discharged.

During the next three and one-half years, she had four attacks of abdominal pain, localized in the right upper abdomen with radiation to the right kidney. These attacks were followed by diarrhea and melena of short duration. She was hospitalized six times and examined by a score of doctors. During this period, five complete gastrointestinal series were done and in no instance was any abnormality found. Gynecological and urological examinations, as well as gastroscopy and sigmoidoscopy, failed to demonstrate anything pathological. All laboratory examinations proved negative, with the exception of the blood sedimentation rate, which fluctuated somewhat.

A diagnosis of possible peptic ulcer was made, but it contrasted so sharply with the clinical picture, that no surgical treatment was suggested. She was a fat, florid-looking woman, good humored and uncomplaining. She was discharged from her last hospital admission with the following conclusion: Her diarrhea and abdominal pains were of neurogenic origin. Melena was unexplained on the strength of all negative findings.

In 1956 she fainted on her way to school and was brought to our hospital in a state of shock. She had persistent diarrhea with tarry stools, and her hemoglobin had dropped to 6 grams. But she responded well to transfusions and after a week all examinations were performed again, and again failed to demonstrate anything abnormal, except a slight anaemia and an elevated blood sedimentation rate. I must say that she was examined very completely, from her mouth down, but nothing was found. She was still very obese (on her admission she weighed 171 pounds). On palpating her abdomen, only soft fat could be felt, and nothing else.

Laparotomy was recommended, to which she agreed. On operation, a small retroperitoneal cystic mass was found, originating from the second (retroperitoneal) part of the duodenum and lying below the transverse colon, medial to the ascending colon. The tumor was dissected out and part of the duodenum from which the tumor originated was resected.

On examination of the specimen, it proved to be a leiomyoma of the duodenum, full of fresh blood and old clots. The tumor had eroded into the duodenal mucosa and in the middle of the erosion one open blood vessel could be seen which was obviously the source of bleeding. Fortunately, no signs of malignant sarcomatous degeneration of the leiomyoma was found. She recovered very well after the operation and continues to be well on her four-year follow-up.

I must say that, in this particular case, it was really impossible to make a proper diagnosis by means of any routine examinations. The erosion into the duodenal mucosa was so small that it easily escaped detection by means of barium filling and, because of its retroperitoneal location and the obesity of the patient, the tumor could not be detected by physical examination. Exploratory laparotomy was the only way of elucidating this case of obscure bleeding.

Conclusions

1. The common causes and management of hemorrhage from the upper gastrointestinal tract are well known and hence have not been discussed. Stress has been laid rather upon the subject of obscure bleeding from this area.

2. Subtotal gastrectomy in all cases of unexplained massive bleeding appears to be the best treatment available, notwithstanding the fact that it is based upon purely empirical grounds.

3. Exploratory laparotomy is recommended as the only diagnostic method of value in unexplained recurrent, non-profuse bleeding from the upper gastrointestinal tract.

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TUMORS OF THE TRACHEA*

RUDOLPH W. PEARSON, M.D.

The Author. *Rudolph W. Pearson, M.D., of Providence, Rhode Island. Surgeon-in-Chief, Department of Otolaryngology, Rhode Island Hospital.*

DYSPNEA, wheezing, cough, hemoptysis, and cyanosis are the classical signs of respiratory disease. Wheezing is a sign of obstruction; cough is an indication of irritation; hemoptysis signifies ulceration; and cyanosis a badly diminished transfer of air. These are frequently seen as a result of mediastinal, pulmonary, or bronchial disease, but are unusual as signs of primary disease in the trachea. This is emphasized by the low incidence of only thirteen cases in thirteen years at the Rhode Island Hospital, an institution of about 600 beds. Approximately 175 bronchoscopies are performed in this hospital each year. This then gives an approximate ratio of 1 to 175. These thirteen cases include one tumor of origin elsewhere than in the trachea, ten cases of proven primary tumor, and two of doubtful origin. Cases of encroachment from immediate structures, such as the esophagus, are not included. The literature contains reports of a variety of tumors, including: papilloma, adenoma, mixed tumor, cylindroma, carcinoma, lipoma, fibroma, chondroma, osteoma, lymphoma, rhabdomyoma, sarcoma, angioma, endothelioma, and amyloid tumor. Fifty per cent of these are benign, 29 per cent of cartilaginous origin.

In reviewing our experience at the Rhode Island Hospital, I should like to begin with the infant group. Diagnosis is difficult in the infant purely on the basis of its small size. The type of stridor which has been attributed to soft cartilages, to absence of tracheal rings, to a non-rigid epiglottis, and to bizarre neurogenic reflexes is sometimes noted in the presence of an hemangioma. This tumor is seen in the proximal portion of the trachea, fluctuating in size with distention of its component blood vessels. When it becomes enlarged with crying or straining it may produce dyspnea, cough, cyanosis, and sometimes death. Other tumors are very rare in the infant, but in older children papillomata may arise as primary tumors in the trachea. They are, of course, not limited to the trachea, but tend to spread to the larynx and bronchi, and present a very difficult problem in therapy. We have seen only one hemangioma and one papilloma in this age group. These will be reported elsewhere.

Among the thirteen cases in the adult classification we have had four adenomata, six carcinomata, two of the undifferentiated variety and four of epidermoid or squamous cell type, one benign polyp, one lymphoma, and one melanoma. The average age in this group is sixty-two. The youngest was forty-four and the oldest seventy-five. The melanoma is included, despite the fact that it was metastatic, because it produced gross obstruction and presented a problem in care. Treatment was obviously palliative, and consisted of three procedures: The first was endoscopy and resection with biting forceps, the second tracheostomy with removal of tumor through the tracheostomy stoma, and the third laryngofissure, since the tumor obstructed the entire subglottic and upper tracheal airway. This was ten years ago, before chemotherapy had any impact on the treatment of malignant disease.

In all cases the chief complaint was shortness of breath or dyspnea. The second complaint was cough, the third wheezing, and the fourth hemoptysis. The wheezing was noted to be primarily inspiratory and expiratory, as compared with the usual expiratory wheeze found in bronchial asthma.

The carcinomata were handled in various ways according to the problem which presented. In one case the primary tumor was removed by resection of a segment of trachea approximately 2 cm. in length. The defect was closed, and no obstruction occurred until death several months later. In another case, that of an elderly woman who refused to submit to surgical excision of a primary tumor, an attempt was made to palliate her symptoms by radiation, but the outcome was fatal. In still another instance an epidermoid carcinoma, in a man of advanced years harboring a simultaneous adenocarcinoma of the large bowel, was treated by insertion of radon seeds in an attempt to control hemoptysis, which was becoming a major problem. Both the hemoptysis and obstruction were controlled.

An undifferentiated carcinoma, located in the

*Read before the New England Otolaryngological Society at the Massachusetts General Hospital, Boston, on November 16, 1960.

lower trachea at the junction of the left main bronchus, was treated by X-ray therapy. This recurred a year later with some extension into the lung substance. It was again treated with X ray, and palliation accomplished for many more months. The tumor, according to the findings at necropsy about two and a half years following the original discovery of the tracheal pathology, was then proved to be related to a breast tumor which had been removed fifteen years prior to the onset of the tracheal disease.

A simple polyp in the trachea is perhaps the easiest tumor to remove, and this can be accomplished either piecemeal through the bronchoscope or by resection of its sessile attachment to the tracheal wall.

The most interesting of tracheal tumors are the adenomata, sometimes referred to as cylindromata. Of the four that we have to report three appear to be benign and the fourth malignant. The malignant tumor was reported at autopsy with multiple metastases all related to the adenomata of the trachea which had undergone malignant changes.

The three benign tumors have responded to the most conservative type of management. The first case, that of a woman in her early fifties, complaining of wheezing in her chest, was found to have a shadow in the right upper lobe on a routine chest X ray. This proved to be a partial atelectasis due to a moderate obstruction of the right upper lobe which was the result of encroachment on the right main bronchus by an adenoma at the lower end of the trachea. After surgical consultation the decision was in favor of bronchial fulguration because of the location of the tumor, and because the probable restoration of patency of the right main bronchus and trachea would be inadequate for further function. This was carried out in seventeen subsequent bronchoscopies, and an excellent result was obtained. During the past three years there has been no evidence of tumor and all of the streaking in the right upper lobe seen in chest films, due to obstruction of the air column, has disappeared.

A woman of seventy-five years of age, long treated for asthma, was found by another physician to have an inspiratory as well as an expiratory wheeze, and wheezing above the carina rather than below. Despite essentially negative X rays, she was bronchoscoped. A multinodular tumor was disclosed in the midportion of the trachea, occluding about 75 per cent of the lumen. Biopsy was obtained, and the diagnosis proved to be epithelioma adenoides cysticum of the trachea. Fulguration of the tumor brought about its complete destruction without invasion of the peritracheal tissues. A complete cure seems likely since, over a period of three years, she has had no evidence of recurrence. Recent tomograms show no evidence of tumor in her trachea nor in the surrounding tissue.

Another interesting case is that of a short, obese, and very cyanotic woman who was admitted to the hospital through the accident room one night for an emergency bronchoscopy. A large rubbery type of tumor was visualized at the level of the carina, obstructing almost totally the right main bronchus, and most of the left. By rapid and frequent biopsies the massive tumor was diminished in size to allow ventilation of the lungs. This was aided by administration of oxygen. An early diagnosis of lymphoma was obtained, and a very dramatic response was accomplished with X-ray therapy.

Tracheal tumors, benign or malignant, present varied problems in diagnosis and treatment. It should be emphasized that in those suspected of having asthma because of inspiratory wheezing, the virtual absence of wheezes within the chest on stethoscopic examination, should point to a tracheal tumor. The diagnosis then becomes an endoscopic problem because X-ray studies seldom show such tumors, unless they have advanced to a stage where they encroach on the airway or into the lobes of the lungs. Biopsy proves the histology, and helps to indicate the type of treatment. The treatment may of course be surgical excision, together with, in some cases, restoration of the structures with proper prosthetics. The use of X-ray therapy in certain types of tumors is certainly indicated, but the more usual approach is through the bronchoscope, when surgery is contraindicated by virtue of age, disability, or accessibility of the tumor. The bronchoscopist can utilize fulguration, insertion of radon seeds, or by his special instruments, resection or biopsy to destroy or remove the tumor, and bring about a resolution of an otherwise extremely difficult problem.

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PEDIATRIC METAMORPHOSIS

GERALD SOLOMONS, M.D.

The Author. *Gerald Solomons, M.D., of Providence, Rhode Island. Assistant Member, Institute for Health Sciences, Brown University, Providence, Rhode Island.*

IN THIS ERA of psychiatric orientation, many therapists advocate the practice of "writing down on paper" exactly how one feels about a particular event or situation. I have endeavored to do just that on the first anniversary of my decline or ascension (depending on how you feel about these things) to the status of "full-time researcher." I indulge in this mental catharsis to prove to myself and friends that the constant state of euphoria presently enjoyed is genuine, and that I really like my job.

In 1959 after several years in the private practice of pediatrics, I took a full-time job as pediatric co-ordinator of the Child Development Study in Providence, Rhode Island. The Child Development Study is a joint endeavor between the Institute for Health Sciences at Brown University, Providence Lying-In Hospital, and several other hospitals and agencies throughout the state. This is one of fifteen similar projects being conducted across the country under the sponsorship of the National Institute of Neurological Diseases and Blindness, the national project being known as the Collaborative Study of Perinatal Factors in Cerebral Palsy and Neurological Disorders.

My reasons for leaving practice were purely personal and were not due to ill health or lack of success.

Having been trained and conditioned for so many years to cope with the pressures and frustrations of private practice, such as the telephone, parents, appointment schedules; the transition to full-time research was a startling one. Initially I wallowed in the luxury of time, but after a few short weeks I became restless with the unaccustomed tranquillity. The feeling was akin to that experienced shortly after giving up smoking—there was no place to put my hands.

I was still examining four-month and one-year-old infants on a daily basis, but my patient load was now no more than six, a number easy to handle after my former work day. The examination of each was done quickly, and I thought competently, with no great effort on my part, as the findings were recorded on a printed form with various check-marks for the normal, and a brief description of the abnormal. I could take as much time as needed for the examination with frequent interruptions for comforting of the infant if necessary. The diagnosis at the conclusion was purely my impression of the present status of the child. The one discordant note was that I knew nothing whatsoever about the history of this patient, had never seen him before, and could not acquaint the mother with my findings, interpretation, prognosis, and treatment. In short, I could not render a service. This was hard to take after being an oracle to so many people for such a long time, and my being naturally talkative and outgoing added to the burden. At times I must admit there was an inward feeling of smug complacency as I found some minor aberration from the normal I assumed the child's private physician had missed. Mainly however, there was the belief that if a few more practical clinicians such as I were on this project, the answers would be found in half the time, with half the effort. Too many impractical scientists and thinkers were in research. My whole attitude could be summed up in the phrase "too much singing and no opera."

At this time, whether by accident or design, I was appointed to a national committee, meeting regularly to plan one facet of this huge undertaking. It was composed basically of three pediatricians and three psychologists, and I approached this assignment with the same magnanimous, bemused tolerance I had acquired. At the meetings I solved the problems discussed with speedy practical solutions which showed to full advantage my years of clinical experience. Instead of the admiration expected, my arguments were coldly and methodically dissected by my colleagues on the committee, and were proved to be unscientific, incapable of quantification, uncodable, and therefore of no statistical value. The practicality was cheerfully admitted, but the results obtained would be utterly useless for scientific research.

So began my metamorphosis and change in outlook. I began to look at the infant system by system, organ by organ, in contrast to the "total child" concept of my previous pediatrics. In the past, palpa-

tion of the abdomen was performed to exclude the abnormal. My mind and fingers were trained to ignore everything other than the signs of disease. Now I had not only to feel the liver edge, I had to delineate it at so many centimeters below the costal margin. The infant previously recorded as hypertonic, now had to be rated quantitatively according to a five-point scale, and the suspicious case had to be spelled out in detail before such a label could be applied.

Going back over my records I found that my early examinations were not as good as I thought they were. More detail and accuracy could have been present and much of what I had written did not quite make sense, and would be incomprehensible to a statistician compiling a punch card from this collection of data. The illegibility of my writing was an embarrassing overtone necessitating no small effort on my part to decipher. There was, however, the comforting finding that my clinical impressions were fairly good and the analysis of each case was sound. I had the experience of private practice to help me disregard the bizarre abnormal sign or emphasize the almost indefinable clue that points the finger of suspicion.

The Child Development Study is composed of many disciplines, the psychologist, social worker, geneticist, nurse, lay interviewer, and my attitude to all these has changed, I'm glad to say. Formerly I tolerated such people as a necessary evil, assigning them a lesser role in the field of science, and attributing to them a different language of communication. (To be fair, this is the attitude held by many M.D.'s.) Working closely with them now I am of the belief that the psychologist may well be able to tell, more than I, the prospective growth and development of the infant in the first few months of life. This I did not believe before, and if I did, I would not have admitted it. It was also a shock to discover that the lay interviewer, with no previous training, could obtain a better comprehensive history from a mother about all the things that had happened to her child and family since her last visit. To be sure, my history was superior in those areas dealing with possible disease, but was woefully inadequate in assessing the stress and strain of family living which influence the child's growth and development.

I have more time for reading now, and have become more selective and critical of those articles I do read. Formerly my interest was directed mainly towards therapy and diagnosis, but now the scientific approach to the problem has assumed a greater importance. "Hypothesis" and "methodology" have become words of daily usage, and what is more I understand what they mean. I honestly do not think that previously I had the interest or the ability to evaluate the merits of a scientific article; the results were all important and the monograph was approved or condemned on this basis alone.

According to Davidson, "The art of arriving at a correct diagnosis is, or should be, based on at least three processes. The meticulous collection of evidence from every available source, recalling all of the conditions which may account for the symptoms, and evaluating the material."[1]

In conclusion then, I think my research training is helping me towards attaining the goal of the "Compleat Pediatrician."

Reference

[1]Davidson, W. C.: The Compleat Pediatrician, Duke University Press, Durham, North Carolina, 1949, page vi

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A PHYSICIAN VIEWS CONGRESS

According to a recent item in the Journal of the American Medical Association, six of nine physicians who ran for Congress were elected. In addition, one Senator and a delegate to Congress from Puerto Rico are physicians. From the earliest times, doctors in America actively participated in political affairs. Among these was Benjamin Rush who was elected a delegate to the Continental Congress on July 20, 1776 and signed the Declaration of Independence on August 2, 1776. The following excerpts from his letters are of interest:

(To His Wife Jewel, Tuesday night, 23 July 1776)

"I am happy in finding that my appointment in Congress gives you so much pleasure. I believe it has operated in the manner you expected upon some of my old friends. I spoke for the first time this day about ten minutes upon a question that proved successful. I felt that I was not thundering like Cato in the Utica of our committee of inspection. The audience is truly respectable. Dr. Franklin alone is enough to confound with his presence a thousand such men as myself. I hope, however, in a little time to experience the same freedom and confidence in speaking that I observe in other members. I find even our illustrious body is marked with features of human nature. We can talk nonsense now and then as well as our neighbors. This reconciles me to myself. . . .

. . . Think, my love, how long our house must be left without a head in my necessary attendance upon Congress. . . . My attendance in Congress does not hurt my business, having as much to do as ever. My wages in Congress are 20/ per day. Good night, my charming girl."

* * *

(To a Friend, one Dr. Walter Jones, July 30, 1776)*

"What shall I say of the august Assembly of our States? It is a wide field of speculation. Here we behold the strength and weakness of the human understanding and the extent of human virtue and folly. Time will meliorate us. A few more misfortunes will teach us wisdom and humility, and inspire us with true benevolence. The republican soil is broke up, but we have still many monarchical and aristocratical weeds to pluck up from it. The history of the Congress that will sit in the year 1780 will be the history of the dignity of human nature. We have knocked up the substance of royalty, but now and then we worship the shadow. O! liberty, liberty, I have worshipped thee as a substance and have found thee so. The influence of the declaration of independence upon the senate and the field is inconceivable. The militia of our state pant for nothing more than to avenge the blood of our brave countrymen upon our enemies on Staten Island.

"Adieu, my dear sir. Continue to enlighten your fellow citizens in the doctrines of a free government. Make them wise and virtuous, and they will be happy. — Yours sincerely, B. Rush"

*From the *Letters of Benjamin Rush*. Edited by L. H. Butterfield. Published for The American Philosophical Society by Princeton University Press in 1951.

ACKNOWLEDGMENT OMITTED

Inadvertently our printer omitted the important acknowledgment of the original publication of the article — *Leonardo and Vesalius, The Two Roads: Surgery and Science* — which appeared in the January, 1961 issue of the Rhode Island Medical Journal.

This article first appeared in the Harvard Alumni Medical Bulletin, Vol. 34, No. 3, April 1960, and our reprinting with the permission of this Bulletin should have carried the notation of the original source.

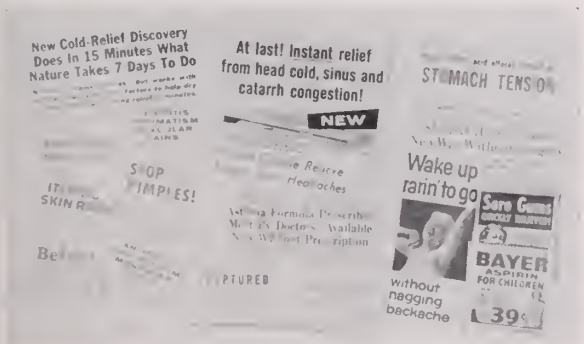
The Editor

Editorials

ARE THESE DRUGS SOLD UNDER GENERIC NAMES?

In the Providence Journal of November 21, 1960 under the by-line of Mr. Selig Greenberg an article appeared titled *The Cost of Medicine,* in which the medical profession is taken to task for lack of zeal in effecting savings by prescribing drugs under their nonproprietary, rather than their registered brand names. We have already commented editorially upon this subject, pointing out some of the problems involved. Furthermore the Society and several hospitals have taken measures in pursuit of the desirable goal of reducing the costs of medications by this approach.

In this article Mr. Greenberg states: "It is ironic, if nothing else, that while the code of medical ethics sternly forbids physicians to advertise, medical societies now generally find themselves in the advertising business up to their necks. This has led some observers to question whether organized medicine can be expected to maintain a truly objective attitude toward the business from which it derives its principal support." It is possible to state categorically that the policy of this Journal and of the Society of which it is the organ are completely independent of and resistant to any influence by the pharmaceutical advertisers who use its pages. We are further willing to state that the ethical drug advertisers in actuality conduct themselves in our experience in a manner wholly circumspect and beyond reproach in this matter. The implications in the quoted lines are quite gratuitous.



In contrast to our position, we should like once again, as we have before in these columns, to call attention to a different attitude displayed by the same lofty newspapers which seem to derive great satisfaction in taking contemptuous pot shots at the "bewildered physician" and "the purveyors of pills." We have in previous issues commented on the continuous sordid display of patent medicine advertisements (see cut) in the local daily press. Not only is the advertising in atrocious taste, but it is a major and distinct disservice and danger to the unprotected public. Pleas for self-medication, as we have pointed out before, lead to self-diagnosis and the postponement of proper and timely medical care. Where actual positive damage is not done, the public is urged to spend its hard-earned money on inactive or inert preparations. Despite the conscientious scrutiny of the Federal Trade Commission and the Food and Drug Administration there is no dependable assurance that some of these nostrums do not contain harmful substances.

Furthermore, with regard to price, we can point out for example that a brand of aspirin advertised in these newspapers sells for fifty-nine cents a hundred tablets, while, under its generic name in U.S.P. quality, the way it is generally prescribed by physicians, it can be obtained for one dollar and twenty-five cents per thousand. Is this not a case of the pot calling the kettle black?

We submit that if these newspapers which profess such a strong interest in the medical welfare of its readers are sincere, and furthermore are as independent of the influence of its advertisers as we are, they will forthwith stop this disreputable disregard of the interests of its readers. Only by ceasing immediately the printing of this offensive and dangerous hogwash and by taking a strong editorial stand against it, can they atone for the positive harm that has been perpetrated upon the public in the past by this abuse of the public trust.

continued on next page

DR. ARTHUR HILER RUGGLES

One of the most distinguished and beloved physicians of Rhode Island died on January 2. Known nationally and internationally as a leader in psychiatry and mental hygiene, and to patients and friends here in Rhode Island as a kind and able counselor, he was always ready to help those in need of his advice.

He was born in Hanover in 1881, received his A.B. from Dartmouth College in 1902 and his M.D. from Harvard Medical School in 1906. In 1910 he was given the degree of A.M. by Dartmouth, and in 1926, 1929, and 1949 he was awarded the honorary degree of Doctor of Science by Dartmouth, Brown, and the University of Rhode Island. Following his internship at Rhode Island Hospital he became assistant physician at Butler Hospital, and in 1912 he went to Munich and studied under Professor Kraepelin. Following World War I he returned to Butler Hospital where in 1922 he became superintendent, succeeding another of Rhode Island's most distinguished physicians, the late Doctor G. Alder Blumer.

During his twenty-six years at Butler Hospital, from which he retired in 1948, he carried on the therapeutic, educational, and research functions of that institution in a way which enhanced its local and national reputation, conferred the priceless blessing of skillful and kindly treatment on its patients, and aided many young physicians to perfect themselves in the science and art of psychiatry. His happiness when the hospital weathered the crisis of a few years ago that almost caused its destruction has been a joy to family and friends and his presence, when he has been able, despite ill health, to get to meetings at the hospital has been an inspiration to all who were present.

Doctor Ruggles' distinguished war service, first in a British war hospital and later as division psychiatrist to the Second Division of the American Army, and the award to him of the Croix de Guerre by France were followed by a peace-time career of even greater distinction. Among many other things he served ten years as president of the American Psychiatric Association and eight years as president of the National Committee for Mental Hygiene. He was elected president of the First International Congress on Mental Hygiene, which was held in Washington in 1929 and represented the United States at the second Congress in Paris. He also took part in the educational work of Yale University as consultant and lecturer.

Here at home his public service was outstanding. He was consultant to several governors of the state and was a member of many committees and councils. He was president of the Providence Medical Association and later of the Rhode Island Medical Society in 1947-48, a time when many difficulties arose and his wisdom and tact were needed.

These are but a few of the many things that Doctor Ruggles did for the community in which he lived. An account of them, however, does not by any means suggest the real meaning and value of his life as he lived it here in Rhode Island. To appreciate what he really meant to his fellow citizens one must have known him intimately and have felt his warmth, vitality and kindness.

EARLY LAVATION

In a recent rather convincing paper in the Archives of Surgery (December, 1960) Doctor Carl J. Heifetz of St. Louis suggests the logic and practicability of early postoperative bathing. He enumerates the measures that have furthered the early restoration of the patient to a normal status, such as early ambulation, acceleration of dietary progression, and early return to normal occupation. Many of these ideas, which caused raising of eyebrows when they were initiated, have now been generally adopted. Early ambulation was practiced in European clinics a generation ago because of the lack of nursing personnel, but it received its main impetus in this country, along with other methods of early rehabilitation, during World War II, when the Armed Forces were obliged to seek out the most effective methods of getting large numbers of sick and wounded back to duty at the earliest possible moment.

More recently the feasibility of removing surgical dressings early or dispensing with them entirely has been recognized. Doctor Heifetz himself was one of the earliest advocates of this practice (1952), and it is being used increasingly in our area. Experimental evidence, he points out, indicates "that clean, well-coapted surgical wounds . . . are sealed by a coagulum of fibrin and red cells within a matter of minutes, and that this seal is an effective barrier against bacterial contamination from external source." The truth of this concept has now been repeatedly confirmed in clinical practice, and those who have followed this principle are enthusiastic about its advantages.

Carrying his reasoning one step further, Doctor Heifetz now argues that the postoperative care of

patients would be simplified if they could resume, early in the postoperative period, normal bathing habits. Consequently he permitted 100 patients with 107 wounds, on whom dressings had been omitted entirely or removed early, to bathe or shower at will beginning on the first or second postoperative day. The first couple of baths were usually taken with the help of a nurse, aide, or orderly. He concluded that early bathing had no adverse effect in healing, that it simplified nursing care, and cleansed the skin better than the routine bed bath.

We find this suggestion very appealing and worthy of trial, but feel that the designation early postoperative bathing is not quite pretentious enough. The term early ambulation, of course, means nothing more than early walking. We are reminded of the pungent comment of our editorial predecessor, the late Doctor Peter Pineo Chase, who when told by a patient that another doctor had suggested that Doctor Chase palpate his abdomen exclaimed with his characteristic elision of the letter "L," "Oh, H...! That's just feewing the bewwy." In order to give this revolutionary concept of early postoperative bathing proper dignity and status we suggest that it be called early lavation.

AUTOMATION IN THE HUMAN BODY

STRIKING THINGS are taking place these days in the replacement of human tissues and mechanisms by non-viable artifacts. Vascular replacements with plastic prostheses have become commonplace, and the replacement of cardiac valves with fabrics and mechanical ball-valve gadgets have already been carried out with some success.

Nothing is more spectacular, however, than a recent announcement of a self-contained, implantable pacemaker for the long-term correction of complete heart block. A myocardial pacemaker with wires brought out through the skin has already established its feasibility in the management of atrioventricular block complicating the surgical repair of septal defects. Previous to that a practical method using skin electrodes, but in the somewhat higher voltages, had already been in use in cases of patients with Stokes-Adams syndrome due to heart block uncontrolled by drugs and usually a sequella of coronary occlusion.

The techniques of miniaturization through the use of tiny transistors, capacitors, and long-acting batteries now make possible the fashioning of a semi-permanent pacemaker imbedded in biologically inert plastics, which can be surgically implanted in the body on a long-term basis. Chardack, Gage, and Greatbatch* of Buffalo, New York, have recently described such an apparatus 6 cm. by 1.5 cm. in size with a transistorized circuit containing only 8 components, and powered by mercury cell batteries, with a shelf life of ten years. The expected functioning usefulness of the apparatus is five years. The pacemaker itself is implanted in the abdominal wall and the wires leading to the cardiac electrodes are also buried within the parietes.

A total of eight patients have already been subjected to this procedure with apparent success, three over a period of several months and long enough apparently to have established the practicality of the method.

This spectacular contribution to our medical armamentarium is indeed an auspicious portent and indicative of the wave of the future.

*Chardack, W. M.; Gage, A. A., and Greatbatch, W.: A Transistorized, Self-contained, Implantable, Pacemaker for the Long-term Correction of Complete Heart Block, Surgery 48:643, (October) 1960.

SCHOOL HEALTH LEGISLATION

IN SEPTEMBER, 1959, the then Governor, Mr. Del Sesto, appointed a committee, with the advice of the state director of health and the state commissioner of education, known as the Advisory Council on School Health Programs. The function of the Council, in the words of the Governor, was "to explore and to make recommendations towards establishing an adequate, uniform, statewide school health program."

The superintendent of schools of Bristol was named chairman of the Council which included representatives of interested professions, including three from the Rhode Island Medical Society. A number of meetings were held over a period of thirteen months at which the Council was able to simplify and codify the existing general laws of Rhode Island as they related to child and school health.

The Council submitted proposed legislation (House Bill 1521) which was introduced in the House of Representatives of the General Assembly, but which was never brought out of the committee to which it was referred. The legislation should be re-submitted this year, and possibly strong medical support might be of help in bringing it to the floor of the House and Senate for discussion and enactment. The changes as made by the Council were and are politically acceptable, and in the opinion of the study group they have the rather wide sweeping effect of simplifying the existing old regulations.

DISTRICT MEDICAL SOCIETY MEETINGS

NEWPORT COUNTY MEDICAL SOCIETY

At a meeting of the Newport County Medical Society held at the Newport Hospital on January 17, 1961, the following officers were elected to serve in 1961:

President ..... José M. Ramos, M.D.
Vice President ..... Donald B. Fletcher, M.D.
Second Vice President ..... Charles A. Serbst, M.D.
Secretary ..... Richard R. Knowles, M.D.
Treasurer ..... Janis Gailitis, M.D.
Delegates ..... Philomen P. Ciarla, M.D.
Charles S. Dotterer, M.D.
Councilor ..... John M. Malone, M.D.
Alternate Councilor ..... Robert L. Bestoso, M.D.
Censors ..... Samuel Adelson, M.D.
James C. Callahan, M.D.

At this meeting of the Society Doctor James Bowes of 548 Bristol Ferry Road, Portsmouth, was elected an active member.

Respectfully submitted,
Richard R. Knowles, M.D., *Secretary*

PROVIDENCE MEDICAL ASSOCIATION

The 114th Annual Meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, January 2, 1961. The meeting was called to order by the president, Doctor Irving A. Beck, at 8:30 P.M.

Minutes of December Meeting

The reading of the minutes of the December meeting was omitted.

Annual Report of the Secretary

Doctor William A. Reid read his annual report which included, among other matters, a list of members who had died during the year. The president called for the membership present to stand in a moment of silent prayer for these deceased doctors.

The complete report of the secretary was accepted and placed on file. Copy is made part of the official minutes of the meeting.

Annual Report of the Treasurer

Doctor Frank I. Matteo, treasurer, read his annual report, copy of which is made part of the official minutes of the meeting. The motion was made, seconded and adopted that the report be received and placed on file.

Election of Officers for 1961

The secretary reported that there were no counter nominations for the slate of officers submitted to the membership with the notice of the December meeting. Therefore, he moved the election of the slate as submitted. The motion was seconded and adopted.

Doctor Beck named Doctors Frank Matteo and William Corvese to escort Doctor Frank D. Fratantuono, the new president, to the rostrum. Doctor Fratantuono briefly expressed his appreciation for the honor conferred upon him by the members of the Association.

Presidential Address

Doctor Irving A. Beck gave his Presidential address under the title of *The R.M.R. of Your Association,* in which he reviewed the participation of the Association in the activities of the Rhode Island Medical Society and more particularly in the history, development, and maintenance of the Rhode Island Medical Society Library.

Report of the Executive Committee

Doctor Reid presented the following report from the Executive Committee:

At a recent meeting the Executive Committee took the following actions,

1. It approved of the application of Doctor Jan S. Dudek, of Johnston, and it voted to recommend his election to active membership at the meeting of the Association on January 2, 1961.

2. It voted that Doctors Arnold Porter and Robert R. Baldridge should be the Association's official delegates to the Rhode Island Council of Community Services.

3. It reviewed and approved of the financial statement of the treasurer for the year 1960.

4. It voted to recommend that the annual dues for active members be $50 and for associate members, $5.

He moved the election of Doctor Dudek to active membership and the adoption of the report of the committee and the recommendations contained therein. The motion was seconded and passed.

Presentation of Membership Certificates

Doctor Beck presented membership certificates

to the two physicians who were elected to active membership at the December meeting of the Association.

Announcements by the President

Doctor Beck announced medical lectures to be held at Providence College and at the John Hay Library at Brown University within the month.

Lecture by Doctor Simeone

Doctor Beck expressed the appreciation of the officers and the program committee to Doctor F. A. Simeone, professor of surgery at Western Reserve University and director of surgery at Cleveland Metropolitan General Hospital, a native of Providence and a graduate of Brown University, for coming to Providence to address the Association on the occasion of its annual session. Doctor Simeone spoke on *The Contributions of Surgical Research to Human Physiology*.

He reviewed the history of classical contributions to physiology and pathological anatomy by such leaders as John Hunter and William Beaumont, spoke of more modern observations of similar nature and described some of his own work. A full text of his paper will be published in the RHODE ISLAND MEDICAL JOURNAL.

Adjournment and Collation

At the conclusion of the program, collation was served in the basement dining room.

Attendance was 87.

Respectfully submitted,

WILLIAM A. REID, M.D., *Secretary*

* * *

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, December 5, 1960. The meeting was called to order by the president, Doctor Irving A. Beck, at 8:35 P.M.

Minutes of November Meeting

Doctor Beck stated that the minutes of the November meeting would be published in the RHODE ISLAND MEDICAL JOURNAL, and therefore they would not be read at this time unless there was a request for a reading.

Report of the Secretary

Doctor Reid reported that the Executive Committee recommended for election to active membership the following: Jorge Benavides, M.D., and Alfred Toselli, M.D.

A motion was made, seconded, and passed that these two physicians be elected to active membership.

Doctor Reid reported that, in accordance with the bylaws, the Executive Committee had prepared a slate of officers and had submitted it to the members with a notice of the December meeting. Counter nominations to this slate must be submitted within ten days of the Annual Meeting to be held on January 2, 1961, at which time, he noted, the election of officers for 1961 would take place.

The secretary read a resolution received from three members of the Association which had been submitted to the Executive Committee. The resolution was as follows:

WHEREAS, the Providence Tuberculosis League has been for many years a source of pride to physicians and laymen alike, and

WHEREAS, said Providence Tuberculosis League has been supported and is now supported with great confidence by the doctors of Rhode Island, and

WHEREAS, the support of this Association has been demonstrated and made known in innumerable ways, and

WHEREAS, the RHODE ISLAND MEDICAL JOURNAL has stated, "The people of Providence, physicians and laymen alike, have every reason to take pride in the accomplishments of the Providence Tuberculosis League. It is outstanding among organizations of its kind in the United States . . . its mobile unit . . . has done pioneer survey work in Providence . . . its value is proven. The Tuberculosis League is showing us the way, backed by the doctors of Providence."

Now, therefore, be it resolved that we do reaffirm our support for the Providence Tuberculosis League and agree that its continued existence and efficient operation is in the best interests of the Providence community.

Doctor Reid reported that the Executive Committee had reviewed the study of the Providence Tuberculosis League made by the Rhode Island Council of Community Services and had also reviewed a dissenting report to this study submitted by four members of the Providence Medical Association. He reported that the Executive Committee had taken the following action regarding the resolution:

> The Executive Committee endorses this resolution and thereby the work of the Providence Tuberculosis League, and it believes the League should continue its operations only until such time as other appropriate State or local agencies indicate that they are willing, ready and capable, in the judgment of this Association, to provide the same level of service as the Providence Tuberculosis League now offers to the people of this community.

continued on next page

He also reported that at a special meeting of the Executive Committee held this evening the objection of the sponsors of the resolution to the inclusion of the word *only* in the statement appended to the resolution by the Executive Committee had been voiced but the Executive Committee, by a majority vote, felt that the word *only* should be retained.

He moved the adoption of the resolution with the statement of the Executive Committee appended to it. The motion was seconded.

Doctor Elihu S. Wing discussed the motion and moved the adoption of the resolution with the statement of the Executive Committee appended to it but with the omission of the word *only* from the Executive Committee's statement. The motion was seconded.

There was general discussion of the motions.

A motion to table the motions before the Association was made, seconded, and defeated.

The motion to adopt the resolution with the omission of the word *only* from the Executive Committee report appended to it was defeated on a division vote.

The original motion to adopt the resolution with the Executive Committee statement was adopted.

Announcements by the President

The president announced that within recent weeks the Association had lost by death Doctors John H. Brothers and Mihran Missirlian. The members stood in a moment of silent prayer in memory of these doctors.

The president announced that the Program Committee had secured Doctor F. A. Simeone, of Cleveland, to be the guest speaker at the 114th Annual Meeting to be held on Monday, January 2, at the Medical Library.

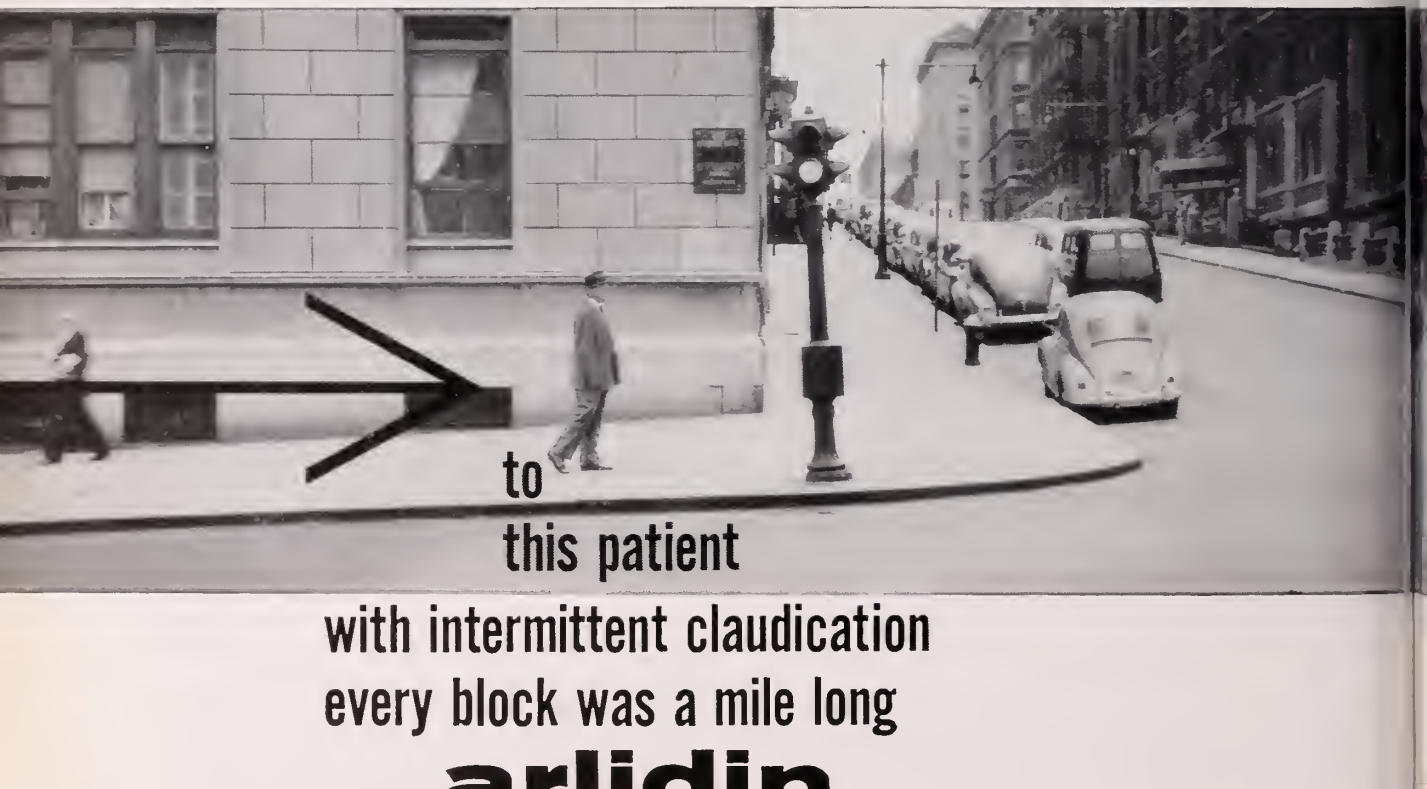
Doctor Beck announced that Providence College invites the members of the Association to hear Professor James Walter Wilson, of Brown University, in a lecture on Monday, December 12, at the Science Building at the College. This lecture is one in a series of the Honors Science Program supported by the National Institutes of Health.

Awarding of Membership Certificates

Doctor Beck awarded membership certificates to the members elected to active membership in the Association at the November meeting.

Resolution on Health Director

Doctor Thomas Perry submitted the following resolution:



with intermittent claudication
every block was a mile long
now... **arlidin**
makes the blocks so much shorter...
he can walk many more of them in comfort

u. s. vitamin & pharmaceutical corporation
Arlington-Funk Laboratories, division
250 East 43rd Street, New York 17, N. Y.

WHEREAS the office of State Director of Health is one of greatest importance to the people of Rhode Island, and

WHEREAS the Providence Medical Association has long maintained that the office of director of Public Health at all levels in our government, state and municipal, should be nonpolitical in the best interests of the public generally, and

WHEREAS the increased interest in recent years by many community organizations and informed citizens has resulted in appropriations for tax funds to provide salaries to attract full-time career-type personnel who may continue to expand and improve the public health services for all citizens,

THEREFORE, BE IT RESOLVED that the Providence Medical Association, in meeting this fifth day of December, 1960, express its sincere hope that the governor-elect and the new General Assembly will continue the policy of selection of public health executive personnel on the basis of their specialized training and experience in this field, in order that the department may render the finest standard of public health service to the citizens of Rhode Island.

It was moved that the Association adopt the resolution and submit a copy to the governor-elect of Rhode Island. The motion was seconded and adopted unanimously.

Scientific Program

Doctor Irving A. Beck introduced Doctor Louis A. Leone, director of Cancer Research at Rhode Island Hospital, who gave a lecture on the subject of *The Role of Chemicals in the Treatment of Advanced Cancer.*

Doctor Leone spoke chiefly of the alkylating agents and emphasized that chemotherapy is aimed at palliation of symptoms in advanced cancer. There is no evidence that life is prolonged except in leukemia and lymphoma. He then explained the effects on cell metabolism, described the alkylating agents now in use and outlined the dosage scheduled for Thio TEPA.

The full text of Doctor Leone's paper will appear in a subsequent issue of the RHODE ISLAND MEDICAL JOURNAL.

The meeting adjourned at 10:20 P.M.

Collation was served.

Attendance was 86.

Respectfully submitted,

WILLIAM A. REID, M.D., *Secretary*

continued on next page



arlidin®

brand of nylidrin hydrochloride N.N.D.

safely increases local blood supply and oxygen where needed most... in distressed "walking" muscles for sustained, gratifying relief of pain and spasm in

intermittent claudication of
arteriosclerosis obliterans
thromboangiitis obliterans
diabetic atheromatosis
night leg cramps
ischemic ulcers
Raynaud's syndrome
cold feet, legs and hands

Arlidin is available in 6 mg. scored tablets, and 5 mg. per cc. parenteral solution. See PDR for packaging.

Protected by U. S. Patent Numbers: 2,661,372 and 2,661,373

NOTE—before prescribing ARLIDIN the physician should be thoroughly familiar with general directions for its use, indications, dosage, possible side effects and contraindications, etc. Write for complete detailed literature

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, November 7, 1960. The meeting was called to order by the president, Doctor Irving A. Beck, at 8:30 P.M.

Minutes of the October Meeting

The president reported that the minutes of the October meeting as well as the Clinicopathological Conference report would be published in the RHODE ISLAND MEDICAL JOURNAL; and, therefore, a reading would be omitted unless there was a request for one.

Report of the Secretary

At a recent meeting the Executive Committee of the Association took the following actions:

1. It approved of plans of the Program Committee for meeting in 1961.
2. It referred to the Council of the state medical society an inquiry relative to the formation of a Medical Assistants Association in Rhode Island.
3. It voted that it should recommend the establishment of utilization committees in general hospitals in the Greater Providence area, as proposed in the report of the Medical Economics Council that was submitted to the House of Delegates of the Rhode Island Medical Society.
4. It held a hearing on the study report of the Providence Tuberculosis League, and it voted that the complete study report, and a dissenting report, be submitted to each member of the committee for further study and for possible recommendation of action on the matter to the Association.
5. It approved of the applications for active membership in the Association of: Louis A. Leone, M.D.; Sui Yen Wang, M.D.; and Charles E. Weinstein, M.D.

Announcements by the President

Doctor Irving A. Beck made the following announcements:

1. Relating to the Interim Meeting of the Rhode Island Medical Society to be held at the Squantum Club, in East Providence, on November 9;
2. Relating to the Inaugural lecture in the Distinguished Lecturers in Science Series sponsored by Providence College to be held on November 14 at the College with Doctor Sidney Farbar as the speaker.
3. Relating to the Third Annual Pharmacy Clinic at the University of Rhode Island on November 15 and 16 to which Rhode Island physicians are invited.

Awarding of Membership Certificates

Doctor Beck awarded membership certificates to the physicians elected to active membership at the October meeting of the Association.

Scientific Program

The president introduced Doctor Mark Altschule, assistant clinical professor of medicine, Harvard Medical School, and director of internal medicine and of research in clinical physiology, McLean Hospital, and also editor-in-chief of Lippincott's Medical Science, who spoke on the *Chemical Aspects of Psychiatry*. The RHODE ISLAND MEDICAL JOURNAL plans to publish the address.

Adjournment

The meeting was adjourned at 9:40 P.M.

Attendance was 105.

Collation was served.

Respectfully submitted,

WILLIAM A. REID, M.D., *Secretary*

WASHINGTON COUNTY MEDICAL SOCIETY

The Annual Meeting of the Washington County Medical Society was held in the Doctors' Room of the Westerly Hospital on Wednesday, January 11, 1960.

In the absence of Doctor Grainger, the president, Doctor Nestor, the first vice-president, called the meeting to order at 11:25 A.M.

The minutes of the previous meeting having been circulated to the membership by mail, and there being no corrections, deletions, or additions, they were accepted as published.

The application of Doctor Joshua Park was passed by the Board of Censors and he was voted into the society unanimously.

Since the Rhode Island Medical Society has been trying for some time to learn how many of the members of the Washington County Society were members of the parent society it was decided to send to the parent society a list of our membership and at the same time try to poll our membership to see for our own benefit just how many are such members.

Doctor Tatum who is attempting to compile a history of the Washington County Society requested some interesting facts about the society, particularly during the war years, from any member who might have same.

Before proceeding further with the meeting, since this was the Annual Meeting at which a new slate of officers is proposed, a committee composed of Doctors Jones, McGrath, and Gongaware was appointed by the Chair to retire and return with the new slate.

continued on page 113

ANNOUNCING—
SPECIFICALLY FOR
INFECTIONS DUE TO
"RESISTANT" STAPHYLOCOCCI

AN ENTIRELY NEW SYNTHETIC
"STAPH-CIDAL" PENICILLIN

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

UNIQUE—BECAUSE IT
RETAINS ANTIBACTERIAL
ACTIVITY IN THE PRESENCE OF
STAPHYLOCOCCAL PENICILLINASES
WHICH INACTIVATE
OTHER PENICILLINS

Bristol™

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NEW SYNTHETIC PENICILLIN FOR "RESISTANT" STAPH

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OFFICIAL PACKAGE CIRCULAR
November, 1960

STAPHCILLIN™

(sodium dimethoxyphenyl penicillin)
For Injection

DESCRIPTION

STAPHCILLIN is a unique new synthetic parenteral penicillin produced by Bristol Laboratories for the specific treatment of staphylococcal infections due to resistant organisms. Its uniqueness resides in its property of resisting inactivation by staphylococcal penicillinase. It is active against strains of staphylococci which are resistant to other penicillins.

Each dry filled vial contains: 1 Gm. STAPHCILLIN (sodium dimethoxyphenyl penicillin), equivalent to 900 mg. dimethoxyphenyl penicillin activity.

INDICATIONS

STAPHCILLIN is recommended as specific therapy only in infections due to strains of staphylococci resistant to other penicillins, e.g.:

Skin and soft tissue infections: cellulitis, wound infections, carbuncles, pyoderma, furunculosis, lymphangitis and lymphadenitis.

Respiratory infections: staphylococcal lobar or bronchopneumonia, and lung abscesses combined with indicated surgical treatment.

Other infections: staphylococcal septicemia, bacteremia, acute or subacute endocarditis, acute osteomyelitis and enterocolitis.

Infections due to penicillin-sensitive staphylococci, streptococci, pneumococci and gonococci should be treated with Syncillin™ or parenteral penicillin G rather than STAPHCILLIN. Treponemal infections should be treated with parenteral penicillin G.

DOSAGE AND ADMINISTRATION

STAPHCILLIN is well tolerated when given by deep intragluteal or intravenous injection.

As is the case with other antibiotics, the duration of therapy should be determined by the clinical and bacteriological response of the patient. Therapy should be continued for at least 48 hours after the patient has become afebrile, asymptomatic and cultures are negative. The usual duration has been 5-7 days.

Intramuscular route: The usual adult dose is 1 Gm. every 4 or 6 hours. Infants' and children's dosage is 25 mg. per Kg. (approximately 12 mg. per pound) every 6 hours.

Intravenous route: 1 Gm. every 6 hours using 50 ml. of sterile saline solution at the rate of 10 ml. per minute.

**Warning:* Solutions of STAPHCILLIN and kanamycin should not be mixed, as they rapidly inactivate each other. Data on the results of mixing STAPHCILLIN with other antibiotics are being accumulated.

DIRECTIONS FOR RECONSTITUTION

Add 1.5 ml. sterile distilled water or normal saline to a 1 Gm. vial and shake vigorously. Withdraw the clear, reconstituted solution (2.0 ml.) into a syringe and inject. The reconstituted solution contains 500 mg. of STAPHCILLIN per ml. Reconstituted solutions are stable for 24 hours under refrigeration.

For intravenous use, dilute the reconstituted dose in 50 ml. of sterile saline and inject at the rate of 10 ml. per minute.

*This statement supersedes that in the Official Package Circulars dated September and of October, 1960.

(continued)

MICROBIOLOGICAL AND PHARMACOLOGICAL PROPERTIES

In vitro studies show that STAPHCILLIN is a bactericidal penicillin with activity against staphylococci resistant to penicillin G. Strains of staphylococci so far tested have been sensitive to STAPHCILLIN *in vitro* at concentrations of 1-6 mcg. per ml. These levels are readily attained in the blood and tissues by administration of STAPHCILLIN at the recommended dosage. This unique attribute is probably due to the fact that STAPHCILLIN is stable in the presence of staphylococcal penicillinase. STAPHCILLIN also resists degradation by *B. cereus* penicillinase. The antimicrobial spectrum of STAPHCILLIN with regard to other microorganisms is qualitatively similar to that of penicillin G; but considerably higher concentrations of STAPHCILLIN are required for bactericidal activity than is the case with penicillin G.

STAPHCILLIN is rapidly absorbed after intramuscular injection. Peak blood levels (6-10 mcg. ml. on the average after a 1.0 Gm. dose) are attained within 1 hour; and then progressively decline to less than 1 mcg. over a 4 to 6 hour period. It is poorly absorbed from the gastrointestinal tract. STAPHCILLIN is rapidly excreted by the kidney.

As shown by animal studies, STAPHCILLIN is readily distributed in body tissues after intramuscular injection. Of the tissues studied, highest concentrations are reached in the kidney, liver, heart and lung in that order; the spleen and muscles show lower concentrations of the antibiotic. STAPHCILLIN diffuses into human pleural and prostatic fluids, but its diffusion into the spinal fluid has not yet been completely studied. However, one patient with meningitis showed a significant concentration in his spinal fluid while on STAPHCILLIN therapy.

Toxicity studies with STAPHCILLIN and penicillin G in animals show that they have approximately the same low order of toxicity.

Certain staphylococci can be made resistant to STAPHCILLIN in the laboratory, but this resistance is not related to their penicillinase production. During the clinical trials, no STAPHCILLIN-resistant strains of staphylococci were observed or developed; the possibility of the emergence of such strains in the clinical setting awaits further observation.

PRECAUTIONS

During the clinical trials, several mild skin reactions, e.g., itching, papular eruption and erythema were observed both during and after discontinuance of STAPHCILLIN therapy. Patients with histories of hay fever, asthma, urticaria and previous sensitivity to penicillin are more likely to react adversely to the penicillins. It is important that the possibility of penicillin anaphylaxis be kept in mind. Epinephrine and the usual adjuvants (antihistamines, corticosteroids) should be available for emergency treatment. Because of the resistance of STAPHCILLIN to destruction by penicillinase, parenteral *B. cereus* penicillinase may not be effective for the treatment of allergic reactions. Information with regard to cross-allergenicity between penicillin G, penicillin V, phenethicillin (Syncillin) and STAPHCILLIN is not available at present. If superinfection due to Gram-negative organisms or fungi occurs during STAPHCILLIN therapy, appropriate measures should be taken.

SUPPLY

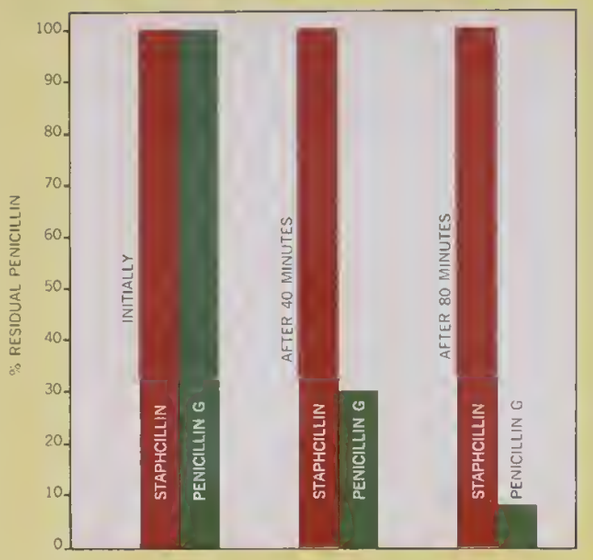
List 79502 — 1.0 Gm. dry filled vial.

BRISTOL LABORATORIES · SYRACUSE, NEW YORK
Division of Bristol-Myers Company

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UNIQUE SYNTHETIC "STAPH-CIDAL" PENICILLIN

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In the presence of staphylococcal penicillinase, STAPHCILLIN remained active and retained its antibacterial action. By contrast, penicillin G was rapidly destroyed in the same period of time. *(After Gourevitch et al., to be published)*

Specifically for "resistant" staph...

Staphcillin™

sodium dimethoxyphenyl penicillin
FOR INJECTION

The failure of staphylococcal infections to respond to penicillin therapy is attributed to the penicillin-destroying enzyme, penicillinase, produced by the invading staphylococcus.

Unlike other penicillins:

1 STAPHCILLIN is effective because it retains its antibacterial activity despite the presence of staphylococcal penicillinase.

2 The clinical effectiveness of STAPHCILLIN has been confirmed by dramatic results in a wide variety of infections due to "resistant" staphylococci, many of which were serious and life-threatening.

Like other penicillins:

STAPHCILLIN has no significant systemic toxicity. It is well tolerated locally, and pain or irritation at the injection site is comparable to that following the injection of penicillin G. *In occasional cases, typical penicillin reactions may be experienced.*

PROFESSIONAL INFORMATION SERVICE — The attached Official Package Circular provides complete information on the indications, dosage, and precautions for the use of STAPHCILLIN. If you desire additional information concerning clinical experiences with STAPHCILLIN, the Medical Department of Bristol Laboratories is at your service. You may direct your inquiries via collect telephone call to New York, PLaza 7-7061, or by mail to Medical Department, Bristol Laboratories, 630 Fifth Ave., N. Y. 20, N. Y.

BRISTOL LABORATORIES · SYRACUSE, NEW YORK
Division of Bristol-Myers Company

WASHINGTON COUNTY MEDICAL SOCIETY

continued from page 112

Doctor Morrone raised the possibility of cutting the meetings in number to two (2) a year chiefly because of the slackening attendance. After a short discussion it was decided that it would be best to leave it as it is at the present, four (4) meetings a year.

The Treasurer's Report was presented by Doctor Tatum and accepted as presented.

A motion by Doctor Gongaware and seconded by Doctor Jones to buy seven (7) more shares of the stocks presently held by the society to make it an even fifty (50) shares passed by a vote of twelve (12) to seven (7). Doctor Agnelli objected to this plan and thought rather that the society should sell its stocks and use the proceeds for some worthy purpose. Doctor Eckel remarked that since we have no project in the immediate offing, we should invest until such time as one was proposed. Doctor Morrone suggested appointing a committee to investigate and discuss such plans.

A motion by Doctor Morrone and seconded by Doctor Agnelli to appoint such a committee was passed unanimously. The committee proposed was Doctor Tatum in conjunction with the Executive Committee.

The secretary was requested to poll the membership for ideas.

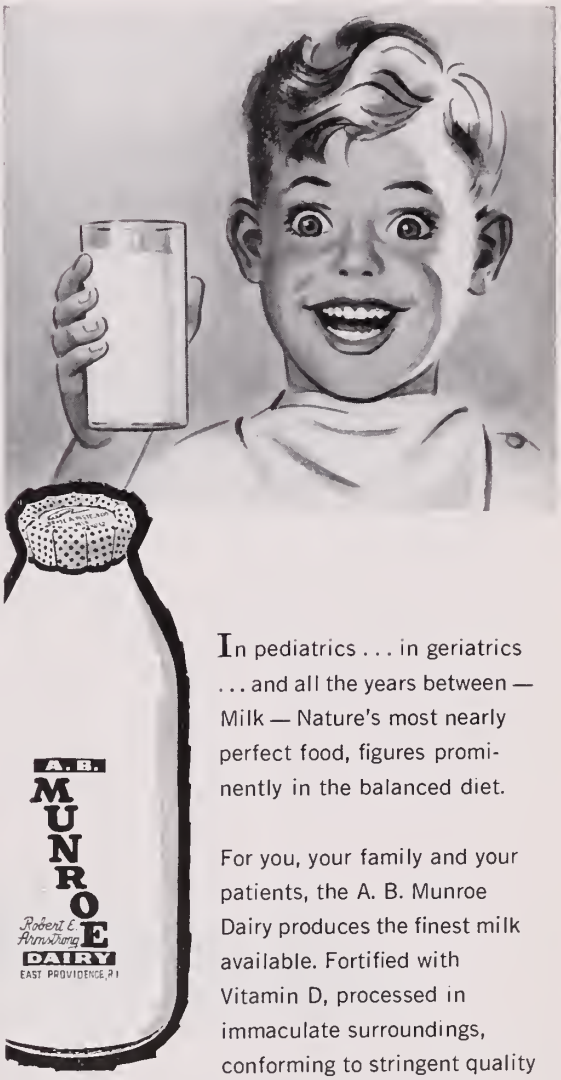
A question arose that since the parent society was including in its dues premium notice a request for contributions to the Benevolence Fund should the treasurer of our society also include such notices in her dues request. A motion by Doctor Agnelli, seconded by Doctor Celestino, to have the treasurer keep up the established procedure was carried by those present.

The appointed committee returned the following slate of officers:

President	James McGrath, M.D.
First Vice-President	Louis Morrone, M.D.
Second Vice-President	William Tully, M.D.
Secretary	John Walsh, M.D.
Treasurer	Julianna Tatum, M.D.
Councilor	Samuel Nathans, M.D.
Delegates	
To 1962	F. Bruno Agnelli, M.D.
To 1963	Hartford Gongaware, M.D.
To 1964	James McGrath, M.D.
Censors	Clifford Hathaway, M.D.
	Hayes Cluxton, M.D.
	Dominic Chimento, M.D.
Auditor	Salvatore Turco, M.D.
Executive Committee	Henry Grainger, M.D., ex-officio
	Pasquale Celestino, M.D.
	John Jones, M.D.

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There being no objections, additions, or deletions the secretary was instructed to cast one vote for the assembled. Same was done and the newly appointed president assumed charge of the meeting.

There being no new business to discuss, the Business Meeting was adjourned at 12:08 P.M.

Doctor Earl J. Mara, the president of the Rhode Island Medical Society, was introduced to the gathering and he addressed the assembly on an informal basis.

Respectfully submitted,

JOHN J. WALSH, JR., M.D., *Secretary*

WOONSOCKET DISTRICT MEDICAL SOCIETY

The annual meeting of the Woonsocket District Medical Society was held at 8:30 P.M., December 7, 1960, in the Woonsocket Hospital Cafeteria. Doctor Victor H. Monti presided.

Due to the length of the speaking program the regular portion of the business meeting was postponed until a later date.

The first speaker was Doctor Harold L. Bedoe, chief medical examiner of the state of Rhode Island. Doctor Bedoe gave a history of the role of the coroners and their subsequent change to the Medical Examiners' system. He also went into detail on the types of death that should be reported to the Medical Examiner's office. In summary, this type of death was one in which there was no doctor in attendance or in case of sudden or violent death.

Doctor Eske Windsberg, chief surgeon at the Miriam Hospital and consulting physician at many other hospitals in Rhode Island, gave a talk on the surgical treatment of acute obstruction of the colon due to cancer in the distal one half of the colon. This was the same paper that he had delivered in the Florida meeting of the American College of Surgeons.

In essence, the Windsberg System of treating complete obstruction of the lower one half of the colon is a one-stage repair. This type of repair is necessary because of the poor results often obtained from a two-stage repair. The essential part of the Windsberg procedure is a thorough preparation of the bowel before the primary anastomosis is made. For further details of technique consult the Journals of A. S. G. & O., June issue, or the reports in the RHODE ISLAND MEDICAL JOURNAL.

* * *

After the annual meeting of December 7, Doctor Monti appointed the following Nominating Committee to select officers for the coming year: Doctor Carlo DeStefani, Doctor Philip J. Morrison, and Doctor Leo Dugas.

The Nominating Committee reported their recommendations at a Special Meeting of the Society held on December 19, and the proposed slate of officers was elected without opposition.

President	EMIL A. KASKIW, M.D.
Vice-President	EUCLID L. TREMBLAY, M.D.
Secretary	ALTON P. THOMAS, M.D.
Treasurer	PAUL E. BOUCHER, M.D.
Councilor	RICHARD H. DOWLING, M.D.
Delegates	SAUL A. WITTES, M.D.
	JOSEPH A. BLISS, M.D.
	EDWARD B. MEDOFF, M.D.
	to serve until December, 1962
Censors	VICTOR H. MONTI, M.D.
	AUREY FONTAINE, M.D.
	EDWARD B. MEDOFF, M.D.

Respectfully submitted,

ALTON THOMAS, M.D., *Secretary*



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THE WHITE HOUSE CONFERENCE ON AGING, 1961

JOHN E. FARRELL, SC.D.

The Author. *John E. Farrell, Sc.D., of Providence, Rhode Island. Executive Secretary, the Rhode Island Medical Society and the Providence Medical Association; Past President, Medical Society Executives Association, and the New England Health Education Association.*

THE FIRST White House Conference on Aging was characterized in advance by *President Dwight D. Eisenhower* as "a significant effort to find better ways to enlarge opportunities for our older people." *Arthur S. Flemming,* secretary of Health, Education and Welfare, called it an "effort directed to solving the major problems confronting the nation's older people, and to developing programs and policies that will make life better for the older people of the future." *Robert W. Kean,* chairman of the National Advisory Committee for the Conference, said it would "provide a meeting ground for thoughtful, forward-looking Americans who are concerned with the conditions that confront many of our senior citizens," and that while "most problems in the field of aging can best be solved by action at the state and local levels. there are areas, however, where the Federal government can contribute."

With this approach in mind, thousands of American citizens participated in local and state conferences on aging, studied the many complex problems presented, and, in the words of *Bertha S. Adkins,* under secretary of Health, Welfare and Education, contributed "time, energy, imaginative thinking, devotion and plain, old-fashioned hard work."

The national conference, therefore, was to be a crystallization of the significant points of agreement arrived at in the state conference. Approximately 2,600 delegates were to meet in Washington January 9-12, 1961, with the understanding that through work groups, sections, group and plenary sessions, they would discuss and act only on the subject matter and the recommendations of the states, without reference to specific pending legislation.

A "Grass Roots" Opinion?

The individual states for the most part undoubtedly developed state conferences at which significant points of agreement were arrived at by local citizens on all the various subject matters that were listed for subsequent discussion at the White House Conference. However, the local or "grass root" agreements were thoroughly dissipated in the group dynamics that dominated the Washington meeting of the delegates from the states, and from national voluntary and public health, welfare and educational agencies.

This is what happened. Each of the approximately 2,600 delegates was assigned to one of twenty major sections, each of which was responsible for discussion in one particlar subject matter area, i.e., Health and Medical Care; Income Maintenance, Education, Housing, etc.

Each section in turn was divided into small work groups ranging in size up to approximately forty delegates. All work groups and sections had officially designated chairmen, discussion leaders, recorders, and resource consultants. For a full day delegates in the work groups had the opportunity to express opinions freely, arguing for support of personal ideas, and presumably reflecting the recommendations of their own states. The actions taken by these various small work groups were then consolidated (by the work group chairmen of a section) into a policy and this draft was submitted to the entire section for its action.

The vote of the section became the final vote, and the action taken became the basis for one phase of the final report submitted at the closing Plenary Session as the White House Conference Report, but no voting on any of the report recommendations was allowed at this closing meeting.

To illustrate the force of such group dynamics consider the subject of financing of medical costs which was one of the topics under Income Maintenance in Section 2. The delegates assigned to this section were first oriented to their topic by the chairman, Charles I. Schottland, former federal social security official, and now a professor at Brandeis University, who indicated a widespread concern about the problems of medical care costs of the aged by the states.

Note in Professor Schottland's remarks and posed questions below how subtly the audience could be oriented to consider any means test for

continued on next page

the distribution of public tax funds to potential recipients as a degrading action—a test of indigency, as he characterizes it.

"Many of the recommendations express the principle of individual and family responsibility, with involvement of government — and particularly the Federal government — only as a last resort and only for those who can pass a test of indigency. We would all agree with the values of individual and family self-reliance and responsibility.

"With reference to one of the controversial matters before our work groups, however, namely medical care, we must ask ourselves several questions. Is this sense of individual responsibility strengthened by forcing old people to pass a test of indigency before they receive needed medical care? And is the family and society in general strengthened if adult children must deprive their own youngsters or must use savings put aside for their own old-age security in order to pay for medical care for an aged parent? Our answers may reflect a difference of opinion, but we should not glibly make generalizations about these matters without considering these questions."

In the subsequent work group meetings of this section, (seven small groups) the question of financing medical care costs through voluntary means, and with government assistance to the states, as provided in the legislation enacted by the Congress in 1960, was opposed by those who favored the addition of medical care costs to the social security system. The emotional argument of a means test versus social security benefits "provided as a right" was in the forefront, with few delegates heard by this reporter indicating much, if any knowledge of what a proper means test would be, and the fact that the Veterans Administration has such a test, and that the method is an accepted part of many federal programs, such as assistance to the blind, small business loans, aid to permanently disabled, and old age assistance. It is also utilized at the state level for state-sponsored programs.

Six of these small work groups voted in favor of the social security system approach to meeting medical care costs, and one group rejected the proposal. Then the recommendation was incorporated as one of several for consideration by the section, which was to take the final vote on the matter of financing medical care, as follows:

"It is the recommendation of the majority that to assure adequate health care for the aged with certainty and dignity, there should be established a basic program for financing health care for the aged within the framework of the Old Age Survivors and Disability Insurance System.

"A minority oppose the use of the OASDI method.

"Both those who place major reliance on the Social Security mechanism and the others agree that:

(a) The medical assistance for the aged program adopted by the 86th Congress should be promptly implemented by the states.
(b) Voluntary prepayment methods should be used to their full potential.
(c) In all programs, the individual's freedom, dignity and self-respect should be protected.
(d) Individual responsibility, self-reliance and thrift in preparing for later years should be encouraged."

The resolution was adopted by a standing vote of 170 to 99.

Thus by the 71 delegate majority vote in this section the public at large would be of the opinion that the action represented the thinking of the entire Conference, since the estimated 2,600 delegates could not vote contrary when the final report was submitted at the concluding plenary session. Thus the sincere people who contributed their time and thinking to the problems of the aging may well be wondering why they made the trek to Washington, because it was evident that many of the "solutions" sought had already been basically predetermined by those setting up the program.

Stacked Sessions?

The pre-conference publicity was featured by statements by former Congressman Aime Forand of Rhode Island, and Professor Wilbur Cohen, Michigan educator and former social security official, that the sessions on financing medical care would be stacked to defeat the idea of paying for medical costs through social security. At the opening plenary session on Monday, January 9, Senator Pat McNamara, in a keynote address to all the delegates, added to the smear campaign against American physicians and dentists with such statements as —

"... Apparently — one tactic of the campaign in this conference — is the placement of A.M.A. — oriented delegates in sufficient strength in certain work groups to give the nation the impression that the conference does *not* favor such medical insurance.

"According to a breakdown of available figures from the Department of Health, Education and Welfare, for example — 92 per cent of the doctors and dentists in Group One of this conference — have been assigned to the work group in financing medical costs. In this group alone, one out of every three delegates represents the medical or dental, or insurance professions...."

A statistical breakdown, as of December 29, 1960, available to reporters, showed there were then 2,512 Conference delegates. A breakdown of the total, *by occupation*, was —

Business Executives	267
Physicians and Dentists	283
Other Health Service	153
Education	353
Insurance	45
Social Welfare	368
Labor Organization	132
Clergy & Religion	219
Other	630
Not Reported	62

Section 2 which took the final vote on the matter of financing medical costs, as reported above, had the following assignments as of December 29:

Business Executives	34
Physicians & Dentists	28
Other Health Service	9
Education	19
Insurance	26
Social Welfare	36
Labor Organizations	41

Clergy & Religion	13
Other	48
Not Reported	3

Group I, to which Senator McNamara referred, had four sections, as follows: (1) Population Trends and Social and Economic Implications; (2) Income Maintenance; (3) Impact of Inflation on Retired Citizens; (4) Employment Security and Retirement.

If it is true, as Senator McNamara stated, that 28 of the 30 physicians and dentists registered to Group I were assigned to the section on income maintenance, we see no grounds for the conclusion the Senator tries to make. Physicians established Blue Shield and predominate on the directing boards of the 74 such plans in the nation, and logically would be assigned to a group discussing medical care costs rather than to one for consideration of employment security, population trends, or inflation impacts.

The most remarkable thing to your reporter is the fact that no one apparently called to Senator McNamara's attention—or to the public's for that matter—that while only *one tenth* of *all* the *physicians* and *dentists* attending the *entire* Conference were assigned to Section 2, which considered the matter of financing medical costs, *almost one third* (41 of 132) of the representatives of *labor organizations,* who are most vociferous about adding to the social security system, were assigned to Section 2!

Rebuttal by Congressman Fogarty

The premeditated and certainly unwarranted attack on American medicine, dentistry, and insurance by Senator McNamara was challenged by Congressman John E. Fogarty of Rhode Island, drafter of the White House Conference legislation, whose keynote address, following that of Senator McNamara, contained the following:

> **"The charges of the Conference being 'stacked,' 'loaded,' or that the delegates are 'ganging up' are serious and insulting to the trust the nation's citizens of all ages have placed in your hands to consider solutions to the problems that have or will confront every one of us in due time.**
>
> **"I am certain it was not the intention of the 'accusers' or these ill-advised critics, but I believe they have challenged the integrity of everyone of us. We now have an additional assignment to prove the falsehood of their statements.**
>
> **"I have no patience and very little respect for any one who would place politics, personal or professional prejudices and greedy, self-interests ahead of positive action for our nation's older citizens."**

* * *

Although only ten of the thirty states making specific recommendations regarding financing of medical care of the aged favored the social security tax, the Conference planners assigned keynote speakers who certainly failed to read, or ignored, the stated General Rules of Order that "Discussion and action in all meetings (underscoring added) shall be based on subject matter and the recommendations of the states, without reference to specific pending legislation."

Thus we had at section meetings on the first day keynoters such as former secretary of Health, Education and Welfare, Marion B. Folsom, stating

> **"The logical plan, and one which is endorsed by most students of the subject, is to finance and administer a program of health insurance for retired people through Old Age, Survivors, and Disability Insurance Program...."**

The majority of the states made no such recommendation, but Mr. Folsom goes along with "most students of the subject," whoever they may be, and thus by generalization influenced the listening audience to his personal views.

Again, with disregard for the "grass root" reports from the majority of the states, *Governor Robert B. Meyner* of New Jersey used his political position to make any program other than the social security plan undignified, and any check on the distribution of tax collected funds morale shattering, by telling the delegates that

> **"The only practical way to accomplish this aim (financing the cost of medical care) on a dignified, sound fiscal basis, it seems to me, is to extend the social security system to include medical insurance for America's senior citizens. This approach will permit the ordinary person, during the course of his working life, to pay a small premium — a few cents a day — and have a paid-up medical insurance policy upon retirement. This would be an earned right — not a morale-shattering charity handout."**

The glowing generalization of Governor Meyner that citizens would have, for a few cents per day, "a paid-up medical insurance policy upon retirement" hardly stands up when one considers that these same oldsters were told years ago that their small contributions to the social security system would give them a cash income that would allow them to live in comfortable retirement with a minimum of financial worries. As *George Meany,* president of the A.F.L. and C.I.O., stated in his address, ". . . the man who retired in 1940 could buy as much with his $22 check as he could buy in 1959 with $49."

The same Mr. Meany, however, used his time to advantage in castigating the American Medical Association because it supported the voluntary approach to the financing of medical care costs, with the aid of the government program passed by the Congress of the United States in 1960.

Apparently anyone, the Congress included, who does not agree with Mr. Meany's ideas is negative and hostile, and offers the public only "inadequate, unwieldy and unrealistic" ways in which to pay their medical care costs. Apparently labor's view must not be challenged when it states that

> **"Labor is not wedded to the explicit provisions of the Forand Bill, the McNamara Bill or any other particular piece of legislation. The workers of this country seek only a good and workable plan. They**

continued on next page

are convinced that the basis of such a plan can be found only in the Social Security System, which is financially sound and administratively capable of handling this huge job."

Labor Celebrates a "Victory"

The required acceptance, in accordance with the Conference rules, of the Section 2 report by all the delegates at the final plenary session without vote, was apparently hailed as a major victory by the labor organization groups. The Washington bureau of the PROVIDENCE JOURNAL-BULLETIN reported in the BULLETIN of Friday, January 13, as follows:

Forand Sees Victory for Health Plan

Former Rep. Aime J. Forand yesterday predicted that Congress this year will pass legislation embodying his plan for extending Social Security into the health insurance field.

He spoke at a victory rally held by delegates who earlier in the day succeeded in getting the White House Conference on Aging to endorse the Social Security approach to medical insurance. The rally was sponsored by the A.F.L.-C.I.O. and the National Association of Social Workers.

Mr. Forand, who refused a last-minute invitation to attend the conference on the ground that it was "stacked" against his plan, said steps are being considered to rally public opinion behind the conference endorsement to win passage of necessary legislation.

Such steps might include use of the national organization of Senior Citizens for Kennedy Committee, which Mr. Forand headed during the recent election campaign, it was indicated.

Sen. Paul Douglas, D-Ill., told the conference before it adjourned that a "large share of the ultimate victory" of the fight for a Social Security medical plan was due to Mr. Forand.

He said he was surprised at the outcome of the conference but felt that its endorsement resulted from "the compulsive power of truth." But, he added, "truth by itself doesn't win." He said more hard work would be needed to achieve passage of the plan by Congress.

He urged the group to use the "time-honored methods of influencing public opinion," and added: "Congress finds it impossible to stand out against an energetic, educated public opinion."

Positive Health for the Aging

In sharp contrast to the propagandists who used their platform assignment as an opportunity to further their espousal of the federal social security system, *Doctor Leonard W. Larson*, president-elect of the American Medical Association and chairman of the Section on Health and Medical Care, devoted his time to a review of programs for "positive health for the aging." After pointing out that the recommendations from the various state conferences were, on the whole, "well thought out and reflected a good deal of careful effort," Doctor Larson stated —

"I think it is unfortunate, however, that four of the sub-topics assigned to our work groups are concerned with the care of the sick, and only one is devoted to the preservation of health. I regret that this necessary subdivision tends to stress treatment at the expense of prevention — to direct attention to the sick and to disregard of the well — and to emphasize organized programs at the expense of individual initiative and responsibility.

"... We must do more than *react* to the minority of older persons who are ill — we must *act* for the great majority who are well. We must shift our emphasis from *defense* to *offense*.

"(This) will demand a whole new emphasis on the individual's responsibility for his own health — on the basis of good nutrition, sufficient exercise and healthful living habits which he can, and must follow throughout his own life."

* * *

The Hospital Association Viewpoint

In a presentation of the subject *Institutional Care and the Community*, in which he reviewed the need for sound community planning by all groups, the types of institutions involved in the care of the aged, and special services for the aged, *Doctor Edwin L. Crosby*, director of the American Hospital Association, offered this comment on the financing of hospital care:

"Prepayment plans of Blue Cross and commercial insurance have contributed considerably, and the recently enacted Kerr-Mills legislation will give material assistance when properly implemented by the states. But other sections of this conference are concerned with this problem, and I will say no more about it except to point out that a specific means of financing must be viewed in the light of its impact on a specific institution.

"For instance, if a prepayment group or government-sponsored program will pay only for care in the hospital, then all aged patients, whether or not they really need intensive care, will enter the hospital. This means our hospitals could be glutted with long-term patients, when these same patients would better be in a nursing home at considerably less cost. But if these same programs will pay for nursing home care, are there enough facilities available? Are their standards of care high enough?

"In discussing the questions of financing, try to think in terms of availability of facilities and utilization of these same facilities."

Compulsory Health Care Rejected

When the policy statement and recommendations of the Health and Medical Care Section were discussed and adopted an amendment introduced from the floor relative to the recommendation on Institutional Care was adopted by a vote of 165 to 120, as follows:

"Existing Federal-State matching programs will provide effective, economical, dignified medical care for our elderly who need help.

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"These should and will be implemented by State legislatures. Compulsory health care inevitably results in poor quality health care."

* * *

The undue emphasis on the social and economic aspects of aging was given so much prominence the Conference almost forgot what it is that makes old age a special problem, *Doctor Theodore G. Klumpp,* president of Winthrop Laboratories, commented at one special meeting of the delegates.

"... Basically, what does it profit a man to have a wad of insurance policies, elegant public housing, income maintenance and social security to the hilt for his old age, if he arrives at that state broken and decrepit in body and mentally senile," he said. "Custodial care for what remains of the mind and body? Yes, of course. But shouldn't we set our sights on a more exalted objective. Shouldn't we concern ourselves more intensely with the problems of health maintenance with the objective that more of our people arrive at their destination sound in body and mind. And if this were to come to pass wouldn't many of the socio-economic problems fade in significance?"

Scope of Conference Discussions

As Doctor Klumpp noted, the focus of too much attention was on financing of medical care. However, many excellent group meetings were held during the week at which the problems of employment, housing, rehabilitation, education, free time activities, religion, and research, as related to the aging population, came in for careful scrutiny.

A most interesting statistical evaluation of the financial value of continued employment beyond the retirement age was made by *Mr. Dwight S. Sargent,* personnel director of the Consolidated Edison Company of New York, in his address at one of the special meetings. Said Mr. Sargent:

"My estimate is that possibly 90% of the 19 million people covered by private pension plans have to retire at age 65. In the group, again, I would estimate that 2%, or about 380,000, come up for retirement each year. 10% of these can continue working. So 90% of 380,000 would leave approximately 340,000 who have to retire as soon as they are 65 whether they like it or not. Based on our own experience of ⅓ electing to continue, possibly 100,000 to 110,000 if given a choice, would elect to continue working.

"I think this figure is conservative, as I know a number of companies who allow a free choice, where 50% or more elect to continue.

"So, if 110,000 continued working just one year beyond 65, the following would be the result:

Social Security would not pay out ($80 Primary Benefit + $40 Wife's Benefit)	$158,000,000
Private pension plans would not pay out (Estimate based on Company pension of $100/month)	132,000,000
Individuals would continue to pay Social Security Tax	13,000,000
Federal and State Income Tax (Estimate based on $5000/year salary)	55,000,000
Continued earnings from full employment (Based on $5000/year average earnings)	$550,000,000

"It thus seems to me that these results are all on the plus side from the point of view of the economy and the individual."

In an appraisal of "Education, Aging and Meaningful Survival," Dr. Edward L. Bortz, chief of Medical Service at The Lankenau Hospital in Philadelphia, indicated that a stock-taking is needed to determine where we stand in our thinking, are current customs adequate as we face the future, and are present educational forms efficient in structure, content and personnel.

"Aging", he cited, "is a dual phenomenon. We grow and we age, and in specific ways we recede. These aspects should be observed. Influences and habits which encourage health, growth and enjoyable living should be promoted. Present day practices and attitudes which limit human growth and flowering should be identified and where possible, corrected, such as misconceptions regarding older citizens in their present unfortunate status as deficit members of our national family. There is certainly a need for a thorough catharsis of our present cultural mores that are inadequate and restrictive."

* * *

In a scholarly paper titled *Spotlight on Research,* Dr. Ewald W. Busse, of the Center for the Study of Aging at Duke University, clarified the definitions of the term *aging,* listed the goals of medical research, and touched upon major areas of medical and dental research, concluding with the statement that

"Lastly, one should recognize that, in the field of aging particularly, there is a tendency to misinterpretation of research results. Because of the emotional influences inherent in the need for action, generalizations are often made on the basis of findings which are valid only for a relatively small sample of elderly persons. When such false generalizations are extended to our entire population, the result can be unfortunate social patterns and legal actions, and wasteful expenditures of time and money. The diversity of population within the United States is obvious, and the factors affecting the health and longevity of this population are numerous and varied. A few of these factors are genetic determinants, climate, nutrition, socioeconomic status, and education. All of these factors must be taken into consideration when health problems are being studied and methods for their prevention and treatment are being sought."

What Now?

Much of the good from the White House Conference may eventually flow back to the state levels for implementation of worthwhile recommendations by the local communities. The controversial issues, such as that of financing health care costs, will provide further fuel for the fires of the politicians and the socialization planners.

Labor organizations will undoubtedly back Senator McNamara in his political maneuverings to place compulsory health insurance before the Congress, and to further plans for an Aging Agency in the Department of Health, Education and Welfare.

Congressman Fogarty has introduced legislation calling for a five-member federal commission on aging to be appointed by the President. The Commission's first job would presumably be to implement the findings of the White House Conference

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on Aging, and beyond that to be responsible for continuing and co-ordinating all federal policies relating to elderly persons. The legislation would seek authorization of 70 million dollars in grants to the states over the next five years, plus 2 million dollars for state planning grants, and 5 million dollars for academic research grants. The proposed commission, backed by an 18-member advisory council, would administer the grants.

Wilbur J. Cohen, professor of Public Welfare Administration in the School of Social Work at the University of Michigan, submitted a task force report on social security to President Kennedy, with the recommendation included for federal coverage of hospitalization and nursing home care for the over age 65 citizens. Mr. Cohen was subsequently named by President Kennedy as assistant secretary for Legislative Matters of the Department of Health, Education and Welfare.

Undoubtedly this task force report, together with the White House Conference on Aging discussions, will be utilized freely in the coming months by the proponents of an additional compulsory tax addition to the social security program to provide limited hospital and nursing home care for eligible citizens over the age 65. The issue will probably be timed for a climax in the political year of 1962.

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concluded from page 96

[3]Gitlin, D., and Craig, J. M.: The Nature of the Hyaline Membrane in Asphyxia of the Newborn, Pediatrics 17:64, 1956

[4]Gruenwald, P.: In Pulmonary Hyaline Membranes Report of the 5th M and R Pediatric Research Conference, Columbus, Ohio M and R Laboratories 1953, pg. 71

[5]Craig, J. M.; Fenton, K., and Gitlin, D.: Obstructive Factors in the Pulmonary Hyaline Membrane Syndrome in Asphyxia of the Newborn, Pediatrics *22*:847, 1958

[6]*Idem.*

[7]Usher, Robert: The Respiratory Distress Syndrome of Prematurity, Pediatrics 24:562, 1959

[8]Born, G. V. R.; Dawes, G. S.; Mott, J. C., and Widdicombe, J. G.: Changes in the Heart and Lungs at Birth, Cold Spring Harbor Symp. on Quant, Biol. 19:102, 1954

[9]James, L. S., and Rowe, R. D.: The Pattern of Response of Pulmonary and Systemic Pressures in Newborn and Older Infants to Short Periods of Hypoxia, J. Pediat. 51:5, 1957

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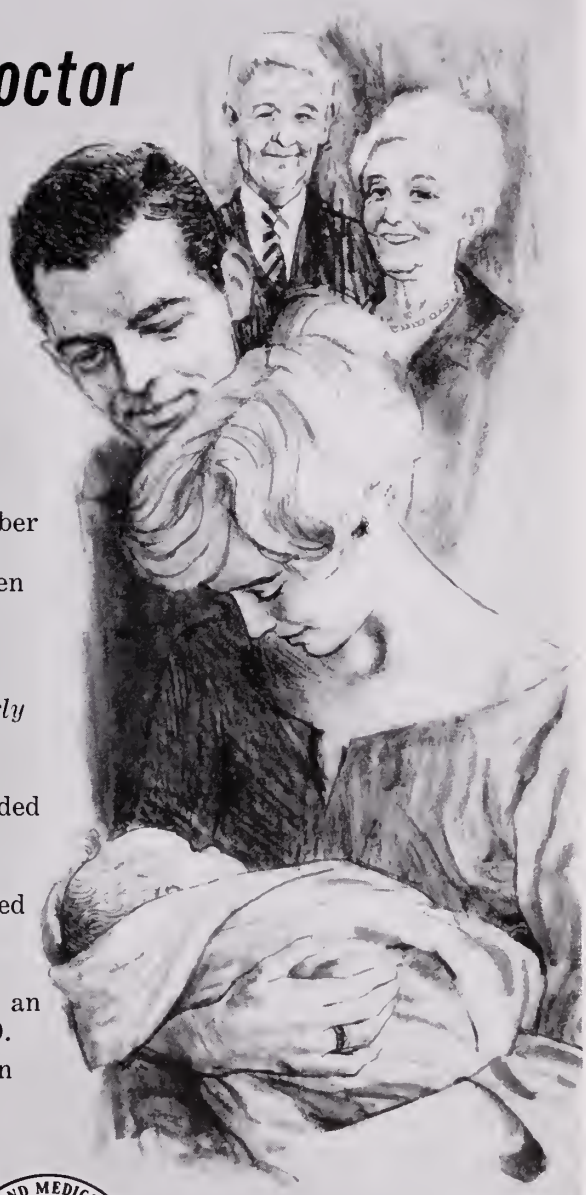
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She's drinking a glass of pure Florida orange juice. And that's important to her physician for several reasons.

How your patients obtain their vitamins or any of the other nutrients found in citrus fruits is of great medical interest—considering the fact there are so many wrong ways of doing it, so many substitutes and imitations for the real thing.

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MARCH, 1961

RHODE ISLAND

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OF MEDICINE

Volume XLIV, No. 3

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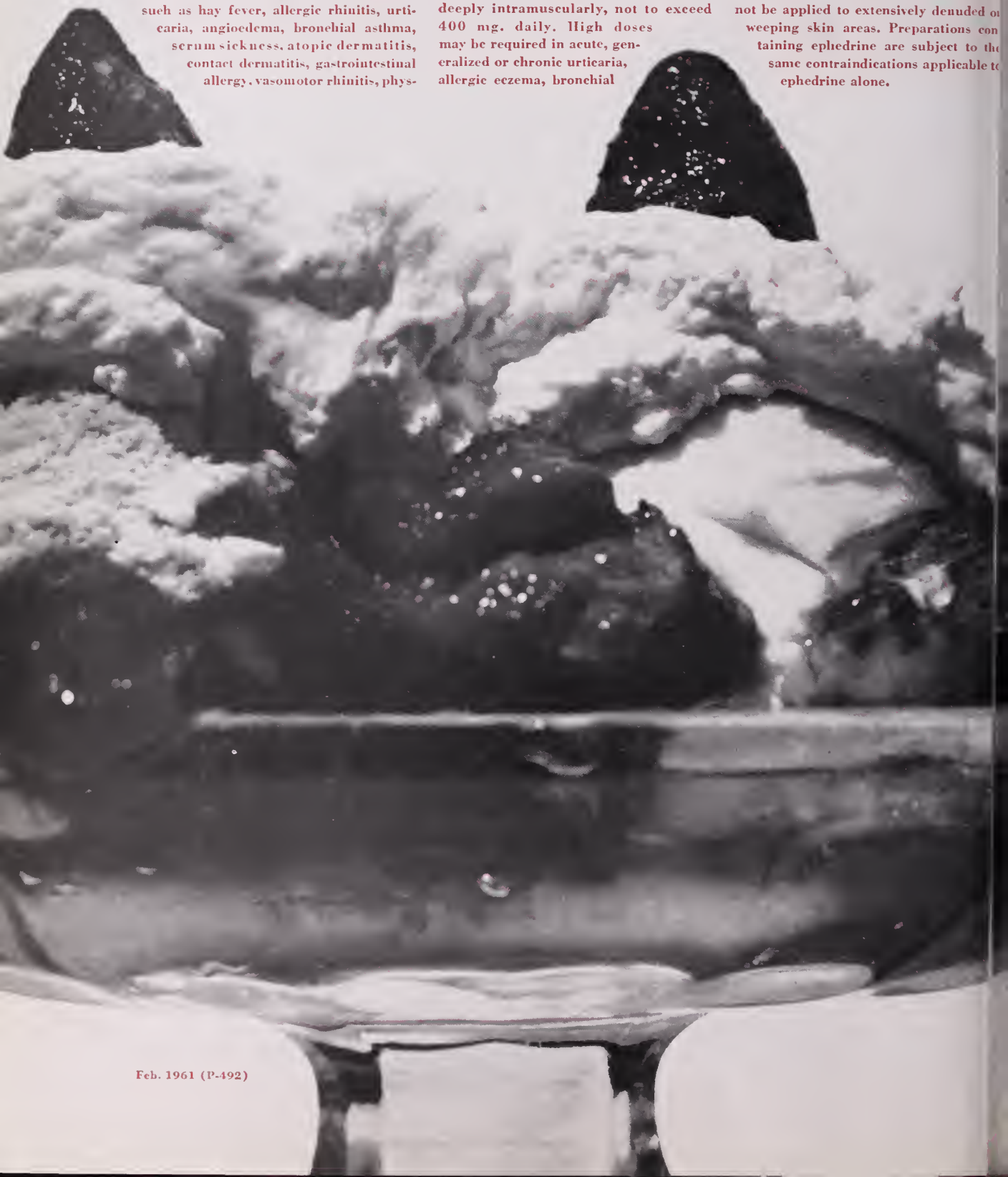
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Feb. 1961 (P-492)

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BRIEFS

FROM THE PHYSICIANS SERVICE PLAN OF THE RHODE ISLAND MEDICAL SOCIETY

WHO REVIEWS PHYSICIANS SERVICE CLAIMS?

When there is a Physicians Service claim which requires individual attention, or there is an unusual claims request, it is reviewed by the Claims Committee.

WHO IS THE CLAIMS COMMITTEE?

It is composed of 12 Rhode Island Physicians. At present they are: J. Robert Bowen, M.D. (Surgery); Robert Hayes, M.D. (General Practice); Leland W. Jones, M.D. (Surgery); Earl J. Mara, M.D. (Int. Med.); Francis W. Nevitt, M.D. (Surgery); Thomas Perry, Jr., M.D. (Surgery); Charles B. Round, M.D. (Surgery); Clarence H. Soderberg, M.D. (Surgery); John J. Walsh, Jr., M.D. (Surgery); Malcolm Winkler, M.D. (Dermatology); Michael DiMaio, M.D. (Int. Med.); Alphonse R. Cardi, M.D. (General Practice).

IN ADDITION, there are 12 physicians who serve as consultants to the Claims Committee, representing the medical specialties.

MEET WEEKLY: Every Thursday, the Physicians Service Claims Director meets with one of these doctors who passes on some cases and screens out the more questionable claims. Half of the total committee meets once a month to consider these cases, and the combined committee and consultants meet four times a year.

In addition, this group of physicians reviews any general problems regarding claim procedures or fee schedules, and makes recommendations for changes to the Physicians Service Board of Directors.

OVER 100 "WILLIAM SMITHS" . . .

There are over 100 William Smiths in the Blue Cross — Physicians Service files. This is why the contract number is important on all claim forms . . . to locate *the right* William Smith.

A REMINDER . . .

Please file your cases promptly. Most physicians report their claims within 30 days from the time service is rendered. Late reporting of claims, or "bunching" of claims, can result in delayed payment.

The RHODE ISLAND MEDICAL JOURNAL

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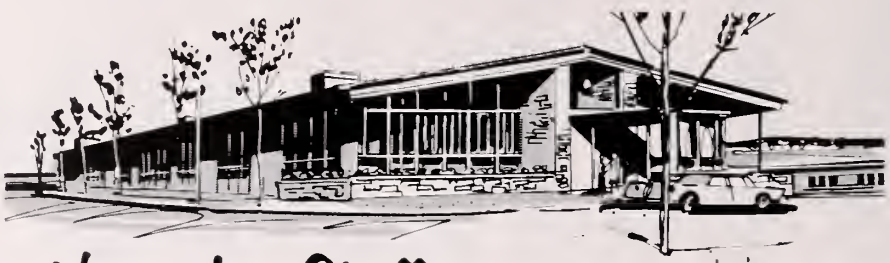
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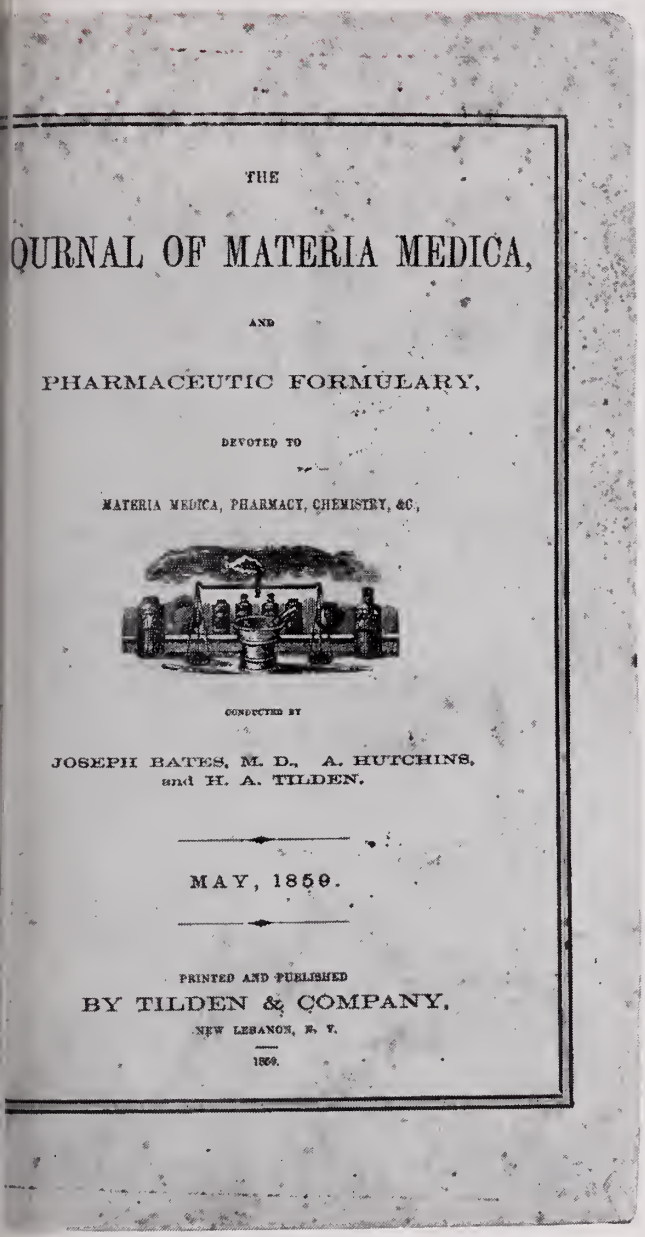
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MAY, 1859.

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Glyceryl Guaiacolate	50.0 mg.
Ephedrine Sulfate	5.0 mg.

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THE MAIL BOX

February 3, 1961

Editor,
Rhode Island Medical Journal
Providence, R. I.

Dear Editor:

Apropos to your article on generic *vs.* trade names of drugs, shortly after the LIFE magazine article on this subject last year I made a very limited survey of the situation as it affected my patients' pocketbooks.

For a considerable time I have routinely prescribed "Serpasil" when I felt reserpine was the drug of choice for a particular patient. After the article appeared I used the generic name only for thirty consecutive prescriptions, and followed up with each patient regarding the cost. In every case the patient was charged the usual price for "Serpasil." In twenty-seven instances the drug dispensed by the pharmacist appeared to be "Serpasil" when compared to a known tablet. Thus, in three cases the pharmacist appears to have dispensed another brand, presumably lower in cost but the charge to the patient was unchanged.

I talked with two of the pharmacists who had dispensed "Serpasil" and was informed by both that when they had a choice they routinely dispensed the higher grade product for the better protection of my patient and me, assuring me that when my prescriptions were filled in their stores my patients would receive only the finest products.

If this pattern indicates the result of universal prescribing by generic name I see no saving to my patients and I do not feel my use of a trade name will place the blame for high prescription costs on me.

I know there is much more to this problem and no conclusive facts are established here.

Sincerely yours,
A. LLOYD LAGERQUIST, M.D.

Dear Doctor Goldowsky:

The editorial, *Chemical and Generic vs. Trade Names,* in the January 1961 issue of the RHODE ISLAND MEDICAL JOURNAL has come to our attention and has been circulated among our staff. Likewise, we have added this title to a current and continuing bibliography of articles about the pharmaceutical industry that have appeared in the medical press.

We are appreciative of your interest in publishing this timely editorial for the many readers of the RHODE ISLAND MEDICAL JOURNAL.

Sincerely,
ROBERT J. BENFORD, M.D.
Director of Medical Relations
Pharmaceutical Manufacturers Association

I say this with all the sincerity of which I am capable: If we undetermine our fundamental principles, and impair our fiscal solvency in the next 25 to 30 years as we have in the past quarter of a century, I cannot believe our democracy will survive.

Individual liberties and rights are among the fundamental principles which have made our country, in a brief span of time, the greatest democracy in all the world. These principles must be protected and preserved. There are serious indications that we need to be reminded of this.

Our strength is being sapped by the paternalism of Federal bureaucracy grown too big, usurpation of power by the Supreme Court grown too mighty, and force of labor leaders grown too arrogant. These are undermining our system, changing our attitudes, and hobbling our will for freedom.

. . . U. S. Senator Harry F. Byrd, as reported in *Spotlight,* issued by the Committee for Constitutional Government.

Many groups have considered over the years the need for training additional physicians and dentists in Connecticut. Now that they have reached general agreement on the question, I shall include in my proposed budget funds for a definitive study of the advisable location, operation and financing of a medical-dental school as an adjunct of the University of Connecticut.

. . . GOV. JOHN DEMPSEY, in his message to the Connecticut General Assembly, January 24, 1961.

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*Pomeranze, J.: J. New York M. Coll. *1*:32, 1959.

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BOOK REVIEWS

EPIDEMIC by Frank G. Slaughter. Doubleday & Company, Inc., Garden City, N. Y., 1961. $3.95

This fast-moving tale of 1965 sets itself romping from one end of Manhattan to the other. Mr. Slaughter bases the book's action on the incredible entry of the black plague into a modern metropolis. Sickness and death spread quickly from person to person, block to block; panic eats into the heart of the city. This killer is soon joined by an equally dangerous companion, Communist sabotage.

Human character is shown in all its facets as people react to this challenge. Drastic measures are taken to curb the spread of the disease, and some interesting sleuthing is carried on in seeking the identity of the subversive master mind.

A surprising climax marks the end of this absorbing fictional narrative.

I am sure that many a physician would enjoy entering into the vivid and often startling world which Frank Slaughter has created in this, his latest novel.

Nancy Knowlton Heinkel

A SYSTEM OF MEDICAL HYPNOSIS by Ainslie Meares. W. B. Saunders Co., Phil., 1960. $10.00

A person in writing a book such as this reveals much of himself. Doctor Meares' reputation in Australia as a very sincere, reputable person, a good hypnotist, clear writer and good lecturer shines through his book. He has written in clear detail with patience and sincerity. He defines as he goes. The outline of the book is simple though the table of contents looks complicated.

Doctor Meares gives the history of the use of hypnosis. He feels that, with the acceptance, development, and insights of psychoanalysis, hypnosis can now be used more healthily. He admits not being able to account for the phenomenon of the hypnotic state. He tells ways of inducing it and his own methods of choice. He discusses how to use it, when to use it and when not to, what to expect of it, and what not to expect. Doctor Meares has achieved his goal of presenting "medical hypnosis as I practice it." He defines medical hypnosis as "a system of treatment in which various practices are linked each to each by their clear relation to underlying psychodynamic theory." All hypnosis involves the client's reaction to suggestion. Doctor Meares contrasts this with psychotherapy which he specifies as "insight therapy."

Much of what he says and repeatedly emphasizes has to do with "rapport" and the doctor-patient relationship and the relief of anxiety. This material would be useful and helpful to any physician in his practice. Doctor Meares also stresses the physician's need to know and understand himself and his own motivations as the other part of the intimate patient-physician partnership. This may relieve the physician of his own anxieties and leave him freer to use his discriminating ability more objectively and perhaps with more sensitivity. There is an interesting section on the effect on the therapist himself of the practice of hypnosis. This section might also be insight-provoking to any physician practicing in any area of medicine.

The book will be disappointing to those who look to hypnosis as a one-shot short-cut to helping people. It illustrates that there are no short-cuts in interpersonal relationships, that there is no magic in helping people, and that all treatment has realistic limitations.

Doctor Meares believes in the use of passive (rather than aggressive) induction of hypnotic states because today's patients are more sophisticated and more authority-resistant and because there is less chance of the therapist's losing face if, as often happens, he doesn't accomplish what he started out to achieve. The author grades hypnotic states from simple relaxation to deep hypnosis. He grades the use from simple relaxation to hypnoanalysis with abreaction. He feels hypnosis could be useful in pre- and post-operative states but not as an anesthetic. "The way in which it is at present being used in this area suggests hysteroid motivation on the part of the practitioners." Doctor Meares believes that hypnosis, as any medical treatment, is useful when used with discrimination by properly trained and experienced, ethical physicians.

Joseph M. Zucker, M.D.

FROM STERILITY TO FERTILITY. A Guide to the Causes and Cure of Childlessness by Elliot E. Philipp. Philosophical Library, Inc., N. Y., 1957. $4.75

This book, by a practicing obstetrician and gynecologist from England, is designed to provide information for childless couples.

It is well written, contains helpful diagrams and would be valuable as supplementary reading for patients undergoing investigation of their infertility.

SUMNER RAPHAEL, M.D.

IL METICCIATO DI GUERRA E ALTRI CASI (War mulattoes and other cases) by L. Gedda, A. Serio and A. Mercuri. Foreword by R. Ruggles Gates, pp. 398, Edizioni Istituto Mendel, Roma, 1960. Lire 10.000

The eminent geneticist Gedda and his collaborators studied a series of forty-four war mulattoes (hybrids), from eight to twelve years of age, thirty-four boys and twelve girls, thirty-five offspring of mating between Negro men and white women, six offspring of a mixed group (Polynesian-Italian, American Indian-Italian) during the last war in Italy.

The study consists in measurements, colors of skin, color and type of hair, shape of nose, lips, X rays of bones, encephalograms, basal metabolism, hematograms, inheritance patterns, rate of growth, and psychometric tests.

Mulattoes are subgrouped as follows: border mulattoes, slave mulattoes, colonial mulattoes, war mulattoes, and melting pot mulattoes (this last subgroup due to the modern way of international connections).

The cases are described in detail. The printing and the illustrations in black and white and color are excellent. The colors of the skin are indicated according to the R. Ruggles Gates chromatic scale.

F. RONCHESE, M.D.

OFFICE DIAGNOSIS by Paul Williamson, M.D. W. B. Saunders Co., Phil., 1960. $12.50

This book is a unique approach to the art of office practice. As such, it contains valuable attitudes, insights and factual material. It is well, however, that the author disclaims universal appeal, since practice is so completely an individual operation, for the work has decided limitations.

In 460 pages, the common, basic data relating to diagnosis of all the systems and most specialties is, of necessity, covered superficially. As the work of a single individual, the text is uneven in quality when compared with a carefully edited compendium by authoritative specialists.

OFFICE DIAGNOSIS will best serve new practitioners whose house officerships have been straight services. If these young scientists can be helped to develop the art of relating to their patients affirmatively, can accept working hypotheses as the expedient bases for management, and can be resigned to the fact that first impressions and final diagnosis may differ, the work will have served its purpose.

It is to be hoped that future editions will omit qualifying adjectives in the consultation sections, such as, "If your patient's condition becomes worse . . . consult a *competent* surgeon." Otherwise, the colloquial style does not detract.

EDMOND B. SINCLAIR, M.D.

SYNOPSIS OF GYNECOLOGY by Robert J. Crossen, Daniel W. Beacham & Woodard D. Beacham. 5th ed. The C. V. Mosby Co., St. L., 1959. $6.50

This is an excellent handbook, aimed primarily at medical students, but equally well suited for use by house officers and physicians who wish a brief, concise, and up-to-date review of gynecology. Admittedly it cannot offer detailed coverage of any subject, but does well within its limitations. It is easy to read on several accounts: the organization is good; extraneous details are lacking; and the authors' wide clinical experience and clarity of thought in presenting same are apparent on nearly every page. Two new chapters have been added on endometriosis and the complications of pregnancy, twelve chapters have been completely rewritten, and the remainder have been revised and updated, according to the authors' statement. The chapter on history taking and gynecologic examination in particular impressed me with its thoroughness.

PAUL A. BLACKMORE, M.D.

COMPLICATIONS IN SURGERY AND THEIR MANAGEMENT. Edited by Curtis P. Artz, M.D. & James D. Hardy, M.D. W. B. Saunders Co., Phil., 1960. $23.00

This imposing volume of 1,075 pages contains the contributions of seventy-one authors in the form of monographs arranged as fifty-seven chapters, covering first, complications of a nonspecific nature, and toward the end of the book, complications of specific therapeutic procedures. The authors selected are for the most part recognized authorities in their fields, and the material presented is complete. In perusing this volume, one is struck with the inclusion of many sections which would be found in any general textbook of surgery, to the point where the reviewer wonders whether surgery itself is the study and avoidance of complications. For example, the first chapter, titled *Infections in Surgery*, might easily be the lead chapter in any surgical text. The ensuing five chapters are likewise on general subjects and Chapter Six is a good review of normal and abnormal clotting mechanisms. Postoperative pulmonary complications are covered in Chapter Nine, and as might be expected there are frequent overlapping references to the same subject later in the book. The chapters on

continued on next page

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Cardiac Arrest, Complications of Anesthesia, Complications of Gastro-intestinal Intubation, and *Complications of Common Fractures* are excellent and very well worth reading. Chapter Twenty-two on the prevention of the spread of cancer is excellent but again might have an equal place in a general textbook of surgery.

It might be noted that, despite the completeness of the volume, the reviewer was unable to find any reference under *Gastric Resection* to the use of a decompressing catheter in an uncertain duodenal stump, although drainage of the area is mentioned.

The format, index, and illustrations of the book are excellent, and many useful references are provided at the end of each chapter.

Although each chapter taken individually makes worthwhile reading, the general impression created by the multiple author technique, which is currently popular, is that of a repetitious and somewhat disjointed collection of monographs. The book should make a good reference volume for the resident or occasional surgeon to whom specific information, easily located, must be readily available. The experienced surgeon, whose practical experience is based on sound general principles, may find in it some new technical suggestions. The impression still remains with this reviewer that complications can be adequately covered in a good general surgical text.

JOHN D. PITTS, M.D.

THE PATHOLOGY OF CEREBRAL PALSY
by Abraham Towbin, M.D. Charles C Thomas, Springfield, Ill., 1960. $8.00

THE PATHOLOGY OF CEREBRAL PALSY is a well-written and well-illustrated monograph about a subject which has climbed into the limelight during the past fifteen years. The author summarizes well current etiological concepts of cerebral palsy, and describes in detail the principal pathological conditions known to be associated with the clinical syndrome, Cerebral Palsy. These conditions are: (1) systemic disorders producing brain lesions, (2) local intracranial pathogenetic processes; and (3) developmental defects of the brain; hereditary or induced.

In the first category, systemic disorders, anoxia neonatorum prematurity, erythroblastosis fetalis, and sepsis neonatorum are major offenders. Anoxia can produce a variety of morphological cerebral changes such as parenchymal necrosis, lobar sclerosis, cystic lesions, and status marmoratus. Prematurity is usually associated with hemorrhage and necrosis and erythroblastosis fetalis with kernicterus.

In the second category, mechanical injuries produce hemorrhage, contusion, and laceration of the brain and its membranes. Circulatory disorders (thrombosis and embolism) produce hemorrhage

and ischemia, while hydrocephaly causes damage to the motor cortex due to compression and thinning of the walls.

The third category, developmental defects, produces arrest of growth and aberrant differentiation of cerebral tissue.

This book will be of interest to pathologists, obstetricians, pediatricians, neurologists, and neurosurgeons, and also to others who are interested in "Cause and Effect" in a group of children with heterogeneous clinical signs and symptoms. It emphasizes the poor relationship between clinical symptomatology and pathological findings. It is recommended for its clear writing and conciseness of approach.

ERIC DENHOFF, M.D.

REP. FOGARTY ON HEALTH PERSONNEL SHORTAGES

(Reprinted from the CONGRESSIONAL RECORD, January 25, 1961)

On several occasions I have called the attention of the House to the rapidly growing shortage of physicians, dentists, and other health workers in the United States. The shortage stems largely from three developments in American life — the rapid population growth, with the greatest increase in the younger and older age groups which require most medical service; from increased demands for medical service; and from the expansions in medical research which require more physicians.

In my discussions of the dimensions of the problem, I have urged the House to move swiftly in two specific directions — first, *to provide Federal financial assistance in the expansion of existing professional schools* and *to aid in the construction of the needed new schools,* and, second, *to provide medical and dental scholarships.*

Today I will add a third part to the program for increasing the supply of physicians and other health personnel in order to protect the maintenance of our present health standards and to safeguard our investment in medical research and medical care facilities.

The bill I am introducing would make possible Federal grants to *augment basic operating incomes of our schools of medicine and dentistry. . . .*

The legislation I am proposing . . . calls for action on the part of the Congress to assist schools of medicine — including osteopathy — and schools of dentistry in meeting their operating costs up to but not exceeding 50 per cent. As I stated earlier, these funds would supplement and could not be used to replace funds currently being used.

Specifically, this legislation would provide for annual block grants to each school for a period of 10 years, plus an additional amount based on the number of students enrolled. Eligibility for this Federal assistance would be confined to public and nonprofit institutions within the United States and exempt from Federal income tax. . . .

150th Annual Meeting

May 2 and 3, 1961

RESEARCH DAY PROGRAM

Saturday, April 15, 1961, 9:00 A.M. – 12:00 NOON

George Building Auditorium, R. I. Hospital

Renal Hypothermia
JOHN B. LAWLOR, M.D., Director
Artificial Kidney Laboratory
SHU H. YOON, M.D., Assistant Resident
ERNEST K. LANDSTEINER, M.D., Chief
Department of Urology

A Study of Possible Immune Mechanisms in a Patient with Adrenal Cortical Insufficiency
RICHARD K. MEAD, M.D., Resident

Chromosome Counting: Preliminary Studies
MISS BARBARA BARKER, M.S., Research Associate
PATRICIA FARNES, M.D., Resident
HERBERT FANGER, M.D., Director
Department of Pathology

Augmentation of Cardiovascular Function by Veno-arterial Perfusion
WALTER E. FARIN, M.D., Fellow in Cardiology

Combined Actinomycin-Alkylating Therapy in Treatment of Advanced Cancer — Preliminary Observations
LOUIS A. LEONE, M.D., Director in Cancer Research

The Distribution of Atherosclerotic Plaques Among Cerebral Arteries
ARTHUR K. PARPART, JR., M.D., Junior Resident

LECTURE

Clinical Use of Glycerolized Frozen Blood
HUGH M. PYLE, M.D., Boston, Mass.

EXHIBITS

1. *Intramuscular Decadron* (Dexamethasone) *for Treatment of Acute Laryngotracheobronchitis*
GEORGE K. BOYD, M.D., Senior Resident

2. *Pulse Duplicator for the Study of Postmortem Cardiac Valve Function*
M. CHERNOV, Student
LESTER L. VARGAS, M.D., Director
Cardiovascular Laboratory

3. *Gonioscopy and Tonography in the Diagnosis and Treatment of Glaucoma*
H. FREDERICK STEPHENS, M.D., Surgeon-in-Chief
MILTON G. ROSS, M.D., Assistant Surgeon
Department of Ophthalmology

4. *Middle Ear Prosthesis for Otosclerosis*
WENDELL ROBINSON, M.D., Assistant Surgeon
Department of Otolaryngology

GUIDES FOR DRUG EXPENDITURES FOR WELFARE RECIPIENTS

THE FOLLOWING REPORT, submitted by the Council on Medical Service of the American Medical Association, was adopted by the House of Delegates of that Association at its meeting in Washington, D.C., on November 30, 1960.

Preface

As noted in the Annual Report, the Committee on Indigent Care scheduled its second regional conference in New York City in July with representatives of ten welfare departments and state medical associations. The meeting was well attended and the discussion of this problem, as well as American Medical Association interest in it, was welcomed by those present.

The Committee, through two regional meetings, discussed welfare drug expenditures with medical society and welfare representatives from seventeen states, as well as with guests from several state pharmaceutical associations. The selection of states invited was sufficiently large that, in the Committee's opinion, all proposed methods of reducing drug expenditures for welfare patients were discussed, and all shades of opinion on this problem expressed.

On the completion of the second regional conference, the Committee on Indigent Care and the Subcommittee on Drugs of the American Public Welfare Association met and prepared *Suggested Guides for Drug Expenditures for Welfare Recipients*. This statement has since been approved, with revisions, by the Council on Medical Service of the American Medical Association and the Medical Care Committee of the American Public Welfare Association. The Council on Medical Service *recommends that the House of Delegates approve the following guides* as enunciating the proper areas of responsibility for the welfare agency, the medical profession, and the welfare patient in keeping welfare drug expenditures at the most economical level consistent with good medical care.

Introduction

Increasingly, state and local governmental units are accepting responsibility for direct payment to physicians, hospitals, nursing homes, and pharmacists for services rendered to welfare recipients, instead of expecting the recipient to pay health expenses from his cash grant. The cost and utilization data available from direct payment procedures have revealed that drugs are a factor in the steadily increasing expenditures for medical assistance.

In recent years, therefore, health and welfare agencies administering welfare medical care programs and their medical advisory committees have become increasingly concerned with the expenditures for prescriptions for their clients. The wide variety of new drugs available in recent years, the high price per prescription for some of them, and especially the unpredictability of expenditures have made this a controversial budget item in many areas.

In the fall of 1959, the Subcommittee on Drugs of the American Public Welfare Association's Medical Care Committee and the Committee on Indigent Care of the American Medical Association's Council on Medical Service began a joint study of possible ways of reducing drug expenditures through joint action of health or welfare agencies and the medical profession, so that their mutual responsibility to provide good medical care for the welfare recipient could be fulfilled without unnecessary cost to the taxpayer.

The prescription is an intrinsic part of the physician's treatment. If the patient does not purchase the prescribed drug from his grant, or if the health or welfare agency is unable to meet the cost of purchasing needed drugs, much of the physician's and hospital care provided may be wasted.

The following suggestions for co-operative action do not, in all cases, apply solely to drug expenditures nor do they necessarily include all ways of keeping this expenditure at a reasonable level; administering agencies will do well to work with pharmaceutical organizations on other aspects of this problem. The present statement, however, deals primarily with relationships between the health or welfare agency and the medical profession, and primarily with drug expenditures.

*A. Public Welfare Agency Responsibility**

1. *The agency must be concerned both with the quantity and quality of care for welfare recipients and with the economical use of public funds.*

Acting as the community's agent in financing

*"Public welfare agency," as used in these guides, refers not only to welfare departments but also to any other public agency administering a medical care program for the needy, including health departments and special commissions.

continued on page 138

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One outstanding advantage of triamcinolone is that it rarely produces edema and sodium retention.[1,2]

The clinical importance of this property cannot be overemphasized in treating certain types of patients. McGavack and associates[3] have reported the beneficial results with ARISTOCORT in patients with existing or impending cardiac failure, and those with obesity associated with lymphedema. Triamcinolone, in contrast to most other steroids, is not contraindicated in the presence of edema or impending cardiac decompensation.[3]

Hollander[1] points out the superiority of triamcinolone in not causing mental stimulation, increased appetite and weight gain, compared to other steroids which produce these effects in varying degrees. And McGavack,[2] in a comparative tabulation of steroid side effects, indicates that triamcinolone does not produce the increased appetite, insomnia, and psychic disturbances associated with other newer steroids.

ARISTOCORT can thus be advantageous for patients requiring corticosteroids whose appetites should not be stimulated, and for those who are already overweight or should not gain weight. Likewise, ARISTOCORT is suitable for the many patients with emotional and nervous disorders who should not be subjected to psychic stimulation. Furthermore, ARISTOCORT Triamcinolone, in effective doses, showed a low incidence of side reactions and is a steroid of choice for treating the older patient in whom salt and water retention may cause serious damage.[2]

References: 1. Hollander, J. L.: *J.A.M.A.* 172:306 (Jan. 23) 1960. 2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959. 3. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. Dosage should be individualized and kept at the lowest level needed to control symptoms. It should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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GUIDES FOR DRUG EXPENDITURES

continued from page 136

the health care of the needy, the agency should not be satisfied with "minimal" care, but should not expend more tax funds than are *essential* to provide good care. The American Public Welfare Association has stated that "Good medical care should meet both quantitative and qualitative standards."[1]

2. *In regard to medicaments, therefore, the agency should encourage efforts to reduce expenditures, but without interfering with the physicians' prescribing drugs necessary to proper medical treatment of the patient.*

   Whatever methods are used to reduce expenditures, leeway must be left for exceptions, when medically justifiable, and for appeal of agency decisions by the attending physician.

3. *Professional direction, supervision, and consultation are essential to the establishment and operation of a program which is both economical and medically adequate.*

   The soundest program is one conceived and administered with the help of a medical director or consultant, and with the aid and support of an advisory committee representing the medical profession. This professional direction and support enables the agency to develop its program on the basis of good practice in the various fields of medicine and, in addition, provides a sound liaison with the local medical profession for interpretation of agency policy and mediation of professional complaints.

   In reference to prescription costs and utilization, the agency should also maintain liaison with the local pharmaceutical association and obtain its assistance in the development and application of policy and in assuring continuity of service. Large agencies may find the employment of staff pharmacists helpful in this regard.

4. *The agency should assume responsibility for training of caseworkers in a basic understanding of illness and in the way a worker can help the physician achieve his treatment objective.*

   The worker may be able, if he has the necessary background of training, to help the recipient understand his responsibility as a patient. He may also help to make sure patients are obtaining and using prescribed drugs in accordance with physicians' instructions. With proper liaison between the welfare agency and the medical profession, specific patient problems may also be solved through agency action or through conferences between individual physicians and caseworkers.

B. Medical Profession Responsibility

1. *The individual physician and the medical profession as a group must also be concerned with maintaining a proper balance between adequate medical care for the welfare recipient and economical use of public funds.*

   It is the official policy of the American Medical Association that "patient care provided in tax-supported health service programs for the needy should meet as high standards of quality and adequacy as can reasonably be made available to others in the community"[2] and that the medical profession should maintain a "continuous and active interest and participation . . . in the whole problem of aid to the needy, including administration, eligibility, financing, and the range and quality of medical services provided."[3]

   Physicians are interested in seeing public funds used effectively to provide adequate care for their welfare patients; as taxpayers, they are also concerned that these funds be used as economically as possible in achieving this goal.

[1] "Tax-supported Medical Care for the Needy," *Public Welfare*, Oct., 1952

[2] "Guides for Medical Societies in Developing Plans for Tax-supported Personal Health Services for the Needy," adopted by A. M. A. House of Delegates, December, 1956

[3] Annual Report of Council on Medical Service to House of Delegates — December, 1959



2. *The individual physician, as the key person in care of the welfare patient, must, therefore, take into consideration not only the medical but the financial aspects of various acceptable modes of treatment.*

   In some cases, the more expensive of two applicable drugs may result in a shorter treatment period, thus effecting economies in other areas. In other cases, less costly drugs may be just as effective.

3. *With particular respect to prescriptions, the individual physician should examine his own prescribing habits to determine whether he can treat welfare patients as effectively at less cost to the welfare agency.*

   Recognizing that the physician's primary obligation is the health needs of his patient, specific suggestions as to ways economies may be accomplished are:

   a. Emphasis on the use of U.S.P., N.F., N.N.D., and A.D.R. counterpart drugs of equal therapeutic effectiveness when available, when the quality of the product is assured, and when a price differential exists.

   b. Limitations on refills: The prescription should be written only for the quantity of the medicament indicated by the patient's current condition, and in such a form as to prevent refills unless specifically authorized by the physician.

   c. Use of standard quantities: Physicians should familiarize themselves with the manufacturers' package sizes of drugs. It may be less expensive to prescribe this quantity, when appropriate to the treatment.

   d. Instruction of patient: Since, due to his situation as a welfare client, the patient may be treated by a number of physicians during a brief period, the physician may have to take extra pains in explaining the proper use of drugs prescribed. The physician will, of course, determine whether the patient is taking any other medication, whether prescribed by another physician or obtained from other sources.

4. *Both the individual physician and medical society should become and remain well-informed concerning the functions and limitations of the welfare medical care program in the community.*

   The medical profession will be better equipped to fulfill the double responsibility of adequate care and economy if it understands the over-all program and problems of the agency. This particularly applies to the agency policies on drugs, since, if the physician prescribes a drug for which the agency will not pay, the patient may not obtain the medication and treatment may be vitiated. Individual physicians may be informed concerning the program through their society's liaison with the agency, through material distributed by the agency, and through individual contact with agency staff.

5. *The medical society, for its part, should maintain an adequate, co-operative and responsible liaison with the welfare agency.*

   Welfare agency attempts to provide proper medical direction and advice for the program should be met by the medical society with a corollary effort to assist in providing adequate, economical care. Society co-operation can be particularly effective in clarifying to physicians the need for prescription limitations and in mediating disagreements between the agency and individual members.

C. Patient Responsibility

1. *The welfare recipient must be educated to realize that he, also, has certain responsibilities to assure that care provided is both effective and economical.*

   Recipients should realize that they should be concerned about unnecessary costs. They should also realize that it is in their own best interests that public funds expended for medical services should be used as efficiently as possible. The welfare department through its casework staff is probably the more appropriate agency to carry on this activity although the physician may also find opportunity to explain the patient's responsibility to him.

2. *The recipient should particularly be informed of the importance of early treatment, continuity of care (where the program allows it), and adherence to the physician's instructions.*

   Patients should realize that prompt, effective care can help them achieve partial or complete self-sufficiency more rapidly.

   Efficacy of care and program costs may both be affected by recipients who avoid treatment until seriously ill, who go to a number of different physicians for treatment, and who do not obtain the medicines prescribed. Proper patient education can also help to eliminate unnecessary prescription refills, excessive amounts in an individual prescription, and unrealistic demands for medication.

* * *

The Committee on Indigent Care and the A.P.W.A. Subcommittee on Drugs are also preparing a *background report*, describing various mechanisms now in use in the states, which will be ready for publication shortly for the information of the state associations and welfare agencies.

CANCER SEMINAR FOR PHYSICIANS

(Sponsored by the Cancer Committee of the Rhode Island Medical Society)

Wednesday from 2:00 P.M. – *5:00* P.M., *April 5, 1961*

Auditorium, George Building, Rhode Island Hospital

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Cancer Committee, Rhode Island Medical Society

Greetings: EARL J. MARA, M.D., President
Rhode Island Medical Society

Moderator of Seminar: LOUIS A. LEONE, M.D., Director
Department of Oncology, Rhode Island Hospital

PROGESTATIONAL AGENTS IN THE THERAPY OF CARCINOMA OF THE ENDOMETRIUM

RITA M. KELLEY, M.D., of Boston, Massachusetts

Assistant Resident, Massachusetts General Hospital; Instructor in Medicine, Harvard Medical School; Senior Physician-Internist, Pondville (Massachusetts) Hospital

THE CONTINUOUS ADMINISTRATION OF CANCER CHEMOTHERAPEUTIC COMPOUNDS BY THE INTRA-ARTERIAL AND INTRAVENOUS ROUTES

ROBERT D. SULLIVAN, M.D., of New York, New York

Chief, Oncology Section, Veterans Administration Hospital, New York, New York

RADIATION TREATMENT FOR CANCER OF UTERUS AND OVARIES WITH SPECIAL CONSIDERATION OF THE ROLE OF SUPERVOLTAGE THERAPY

RUTH GUTTMANN, M.D., of New York, New York

Associate Professor of Radiology, Columbia University;
Director, Department of Radiotherapy, Francis Delafield Hospital, New York, New York

SURGICAL MANAGEMENT OF CARCINOMA OF THE UTERUS

MICHAEL J. JORDAN, M.D., of New York, New York

Director, Department of Obstetrics and Gynecology, St. Clare's Hospital, New York, New York;
Associate Professor, Clinical Obstetrics and Gynecology, New York University-Bellevue Medical Center, New York, New York

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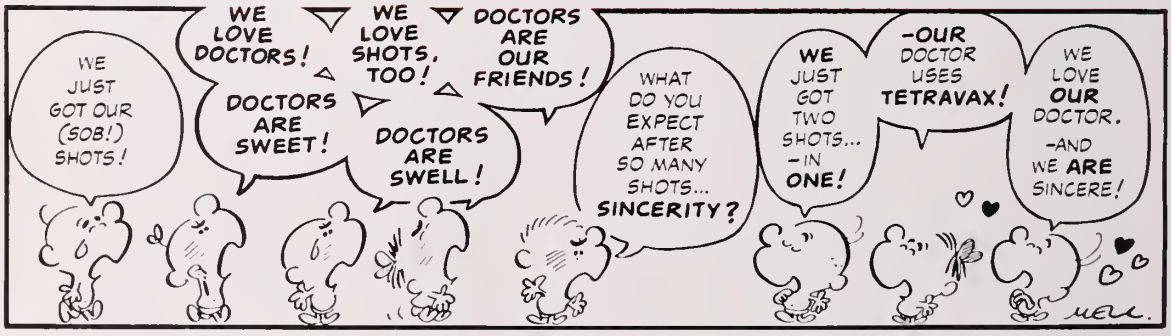
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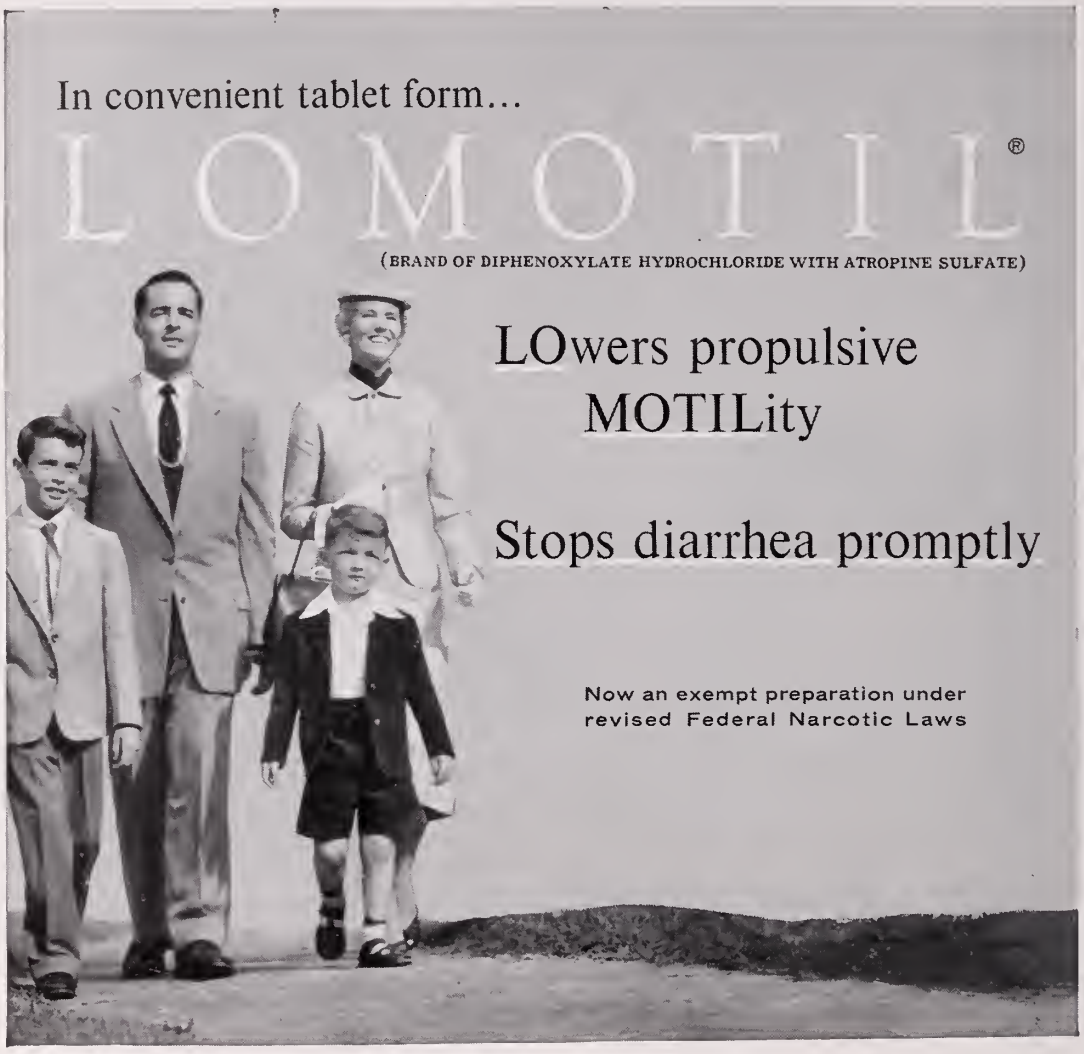
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EXPERIENCE WITH LIVER NEEDLE BIOPSY IN 700 CASES

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IT IS COMMONPLACE KNOWLEDGE that the late decades have seen great progress in the understanding of the etiology and diagnosis of disease, due to the widespread use, in clinical medicine, of techniques which before that time were not dreamed of for experimental use, even on animals. One of the less spectacular, but not less important of these, has probably been the use of needle biopsies of various organs, especially the liver. Over twenty years after the discovery of this technique, we feel able to assess rather exactly its effective value.

The purpose of this paper is to discuss its general indications and contraindications and to give a report of our experience in this field. The illustrations are given only with the purpose to demonstrate some of the most typical or interesting findings, that we encountered in our work, and do not intend to be a complete survey of the many diagnostic possibilities of needle biopsy.

We usually use the lateral approach in the midaxillary line, in the place where by percussion the upper liver border is to be found. If interposition of the bowel is suspected, it must be ascertained by radiography and if confirmed of course no biopsy should be performed. Only in a minority of the cases, when the liver was frankly enlarged and there was no reasonable danger to penetrate the stomach, the gallbladder or the intestines, an anterior approach has been used. Analgesics were freely given before the performance of the examination and during the following twenty-four hours. That the examination did not provoke much distress is well demonstrated by the fact that the patients were usually willing to allow the repetition of the examination sometime afterwards, if requested. Actually, some of them even requested it, a feature which can be explained by the fact that primitive people believe more in what they think to be a surgical treatment than in conservative treatment.

Most of the biopsies have been performed with the Silverman needle,[1] but the last 150 biopsies have been performed with the Menghini needle,[2,3] an Italian invention. Lately this author introduced a new modification, which makes the performance of the biopsy even easier and the need of co-operation of the patient is practically eliminated. This technique is extremely rapid and the patient's discomfort minimal. It is thoroughly described elsewhere.[4] By this aspiration technique only rarely an insufficient specimen, or no specimen at all, is obtained. In the opinion of many authors with which we agree[5] in such rare instances there is no danger in repeating the procedure immediately. The specimen is successively slowly ejected on a small piece of filter paper and placed in a fixative solution with a minimum of manipulation, in order to avoid undesirable breakage. Formalin may be sufficient, but we prefer the Carnoy solution. After only one hour the fixation is already satisfactory and in twelve hours the specimen is ready for microscopic examination.

In daily clinical practice, a satisfactory diagnosis can usually be reached without need to resort to needle biopsy. Nevertheless, a limited but important group of cases cannot be diagnosed without it. In known disease the indication is only relative, but even then the needle biopsy may give useful information for prognosis and treatment. Actually, some authors feel that it should be performed in every case of liver disease, especially with jaundice, because, in spite of the great advances in the understanding of physiologic and biochemical processes in the liver, precise functional methods for establishing the diagnosis and prognosis of hepatic diseases are not yet available and the morphologic study of hepatic tissue obtained by biopsy techniques is and probably will long remain the best means of determining the nature and significance of pathologic processes occurring in the liver.[6]

continued on next page

Diffuse disease can be demonstrated with the highest accuracy. One of the most frequent of them, i.e., liver cirrhosis, can, as a matter of fact, be diagnosed in almost 100% of the cases.[7,8] Only rarely will a minimal degree of this condition be overlooked.[9]

Sometimes the differentiation between portal and postnecrotic cirrhosis may be difficult.

In focal lesions, experience has demonstrated positive results in about seventy per cent, more than could theoretically be expected. Zamcheck and Sidman[10] state that in case of a single negative result "the performance of multiple biopsies minimizes its diagnostic error." When we performed them, we could further raise the percentage of positive specimens in a substantial number of cases, but our experience is too limited to allow us to give exact percentages.

We can at least come with safety to the conclusion that a normal result can practically exclude any diffuse pathologic liver condition, while the existence of focal lesions cannot be definitely ruled out by it. According to the literature the needle biopsy can successfully diagnose from 72[11] to 85 per cent[12] of the cases. In our experience, it is somewhat difficult to confirm or deny these figures.

We began to be interested in liver needle biopsy ten years ago, and since then we have performed about 700 biopsies. This rather large number is due to the fact that we realized that this procedure would be of special importance in a country like Israel, where a great many of the people suffered long periods of undernourishment, sometimes lifelong, in the Hitler camps or in primitive Oriental countries, and where the large immigration waves of Jews from the Arab countries brought tens of thousands of cases of parasitic infections of the liver. At the beginning we performed many liver needle biopsies because, as is usual, every time that a physician has at his disposal a new tool or technique, he wishes to be in a position to make a true personal evaluation of its possibilities. Now, today we are performing far less liver biopsies, and these only in the more puzzling cases. Many authors[10,12] stress the necessity of a special training for the pathologist in order to get used to the interpretation of the small specimens. At the beginning, we too had some difficulties in arriving at an exact diagnosis in some cases. In due time the accuracy of our results has improved up to 89 per cent while in 8.5 per cent the findings were noncontributory and in only 2.5 per cent misleading—figures which agree with the percentages quoted in the literature.

If now we look at this procedure from another point of view, we find that the needle biopsy corrected incorrect clinical diagnosis in 17.9 per cent in cirrhosis, in 14.6 per cent in hepatitis, in 9.8 per cent in neoplasms of the liver and in 20.6 per cent in obstructive jaundice.[11] The findings of Cogswell were substantially the same as ours with only minor differences.

Berk and Shay,[13] Mayer and Wurl,[14] Fisher and Faloon[15] found even higher percentages—ranging from 26 to 30 per cent—in which the needle biopsy corrected the clinical diagnosis.

The indications are so manifold that there is no need of repeating the long lists found in the literature. Any disease, parenchymal, infective, obstructive, metabolic, tumoral, granulomatous or circulatory, which can involve the liver, is an indication for needle biopsy, when, of course, as has been stated, all other methods have failed to clarify the diagnosis. By general consensus, every case of fever of doubtful origin and long duration, especially in patients over forty years of age, is by itself an indication for liver needle biopsy, as frequently some of the conditions mentioned can be demonstrated in such cases.

In some cases we were able to cultivate the causative organism, e.g., Brucella melitensis, Salmonella typhosa, from the specimen.

There is general agreement that even during surgery needle biopsy is superior to wedge biopsy, as it makes it possible to obtain a deeper specimen, at greater distance from the sub-capsular changes which are sometimes misleading and it avoids the artifacts due to the manipulation of the liver. It is therefore advisable to perform it at the beginning of the operation.[16,17,18]

Let us now describe some cases from our collection as examples. As stated at the beginning, we do not intend to give a complete survey of the many diagnostic possibilities of liver needle biopsy.

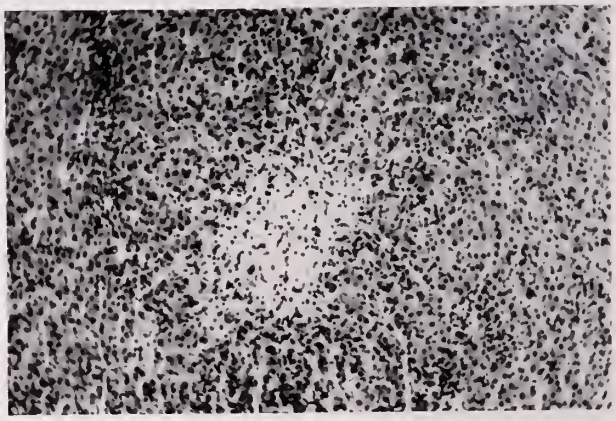


FIGURE 1
Infectious Hepatitis

Case 1

A twenty-three-year-old woman was admitted because of general malaise, weakness and nausea

of one week's duration. She did not notice jaundice, but at physical examination subicterus of the sclerae was found and the liver was somewhat enlarged and tender. The liver function tests were normal with exception of a serum bilirubin of 2 mg. percentage and an alkaline phosphatase of 6.5 Bodansky Units. The erythrocyte sedimentation rate was 22/45. On urinalysis traces of bilirubin were found. The liver needle biopsy showed findings typical of infectious hepatitis.

The rather large extension of the parenchymal damage was unsuspected in this almost anicteric patient.

Case 2

A sixty-five-year-old man suffered from lymphatic leukemia of four years' duration. When he developed serum jaundice, both diseases were easily demonstrated by needle biopsy.

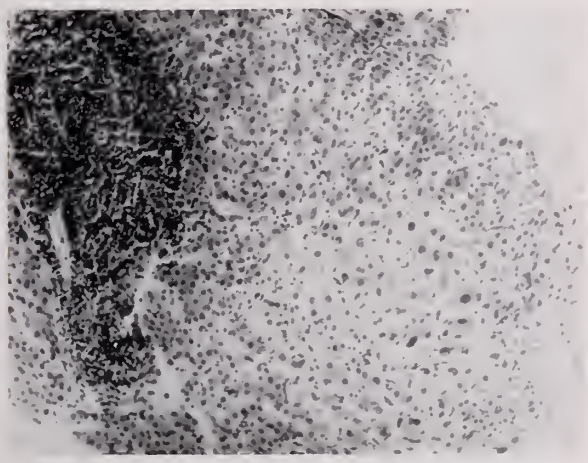


FIGURE 2

Lymphatic Leukemia + Infectious Hepatitis

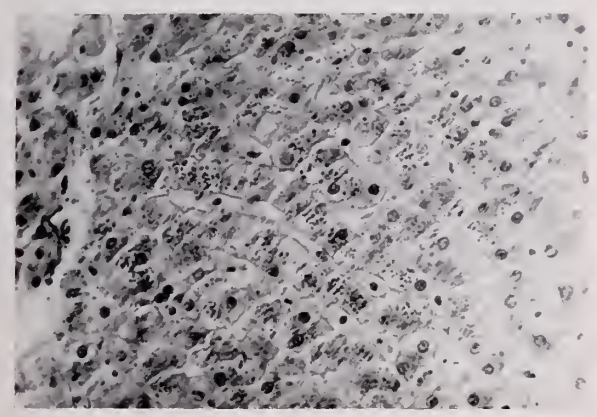


FIGURE 3

Dubin-Johnson's Disease. Central Portion of Lobule; Large Liver Cells with Coarse Granular Crystalline Content (H.E. 450x)

Case 3

A thirty-eight-year-old man, who gave no history of alcoholism, suffered for some weeks before admission with slight unspecific abdominal distress. On physical examination, he was in good condition, the liver was somewhat enlarged and irregular, the spleen was barely palpable. The liver function tests were still normal. The needle biopsy demonstrated a well-advanced liver cirrhosis, with severe distortion of the structure and fibrotic reaction.

Case 4

In a typical case of hemochromatosis with a high serum iron level of 337 micrograms per cent the diagnosis was easily confirmed.

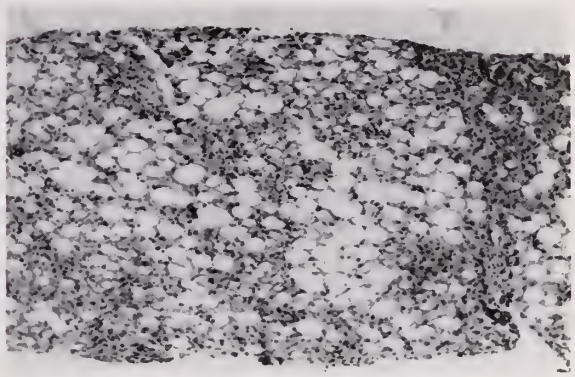


FIGURE 4

Fatty Liver

Case 5

A twenty-two-year-old man suffered from mild jaundice from childhood. On physical exertion or with intercurrent illnesses the jaundice deepened, and then he suffered from severe pain in the right upper quadrant of the abdomen, weakness and lack



FIGURE 5

Amyloidosis

continued on next page

of appetite. On physical examination mild jaundice and a slightly tender liver were found and the sedimentation rate and complete blood count were normal. On urinalysis 1 plus bilirubinuria. Serum bilirubin 3.8 mg. per cent, of which 2.9 mg. per cent was direct positive, were noted. The bromsulfaline test showed 19 per cent of the dye retained after forty-five minutes. A cholecystogram showed that the gallbladder was not visualized. Needle biopsy demonstrated "chronic idiopathic jaundice."[19] As this was the second of the twelve cases we collected, we were able to establish the diagnosis of Dubin-Johnson disease on macroscopic examination of the specimen, owing to its pathognomonic black color.

Case 6

A fifty-seven-year-old man, an alcoholic since youth, complained of upper abdominal distress of some years duration, nausea, and sometimes vomiting. He felt weak and anoretic. On physical examination a large liver and a somewhat enlarged spleen were palpated. The liver functions were borderline. Liver cirrhosis was suspected. The liver needle biopsy revealed only a fatty liver. This is a rare case of alcoholism, and he happened to be a new immigrant from Eastern Europe to Israel, where this condition is very rare.

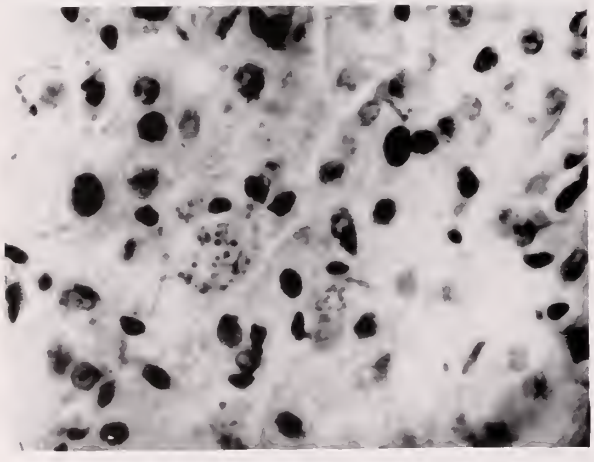


FIGURE 6
Donovan Bodies in Leishmaniasis

Case 7

An old man with long-standing pulmonary tuberculosis, hepatomegaly and albuminuria was considered as a most probable case of secondary amyloidosis. The liver needle biopsy confirmed it.

Case 8

A twenty-year-old Yemenite female was admitted because of huge hepatosplenomegaly. The liver function tests were strongly pathologic, but her general condition was rather good, although there was daily fever up to 102-104 degrees. As

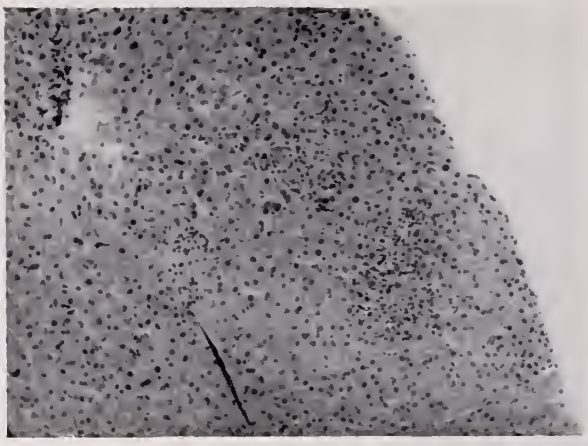


FIGURE 7
Brucellosis

the picture was rather unusual for a simple cirrhosis, a needle biopsy of the liver was performed. The liver structure was normal, but the Kupffer cells were filled with Donovan bodies, the parasites of Kala-Azar. Afterwards we found all the other signs of the disease, including the typical pattern of the fever, with two peaks in twenty-four hours, one during the day and the other during the night, which we had previously missed, the so-called dromedary-type.

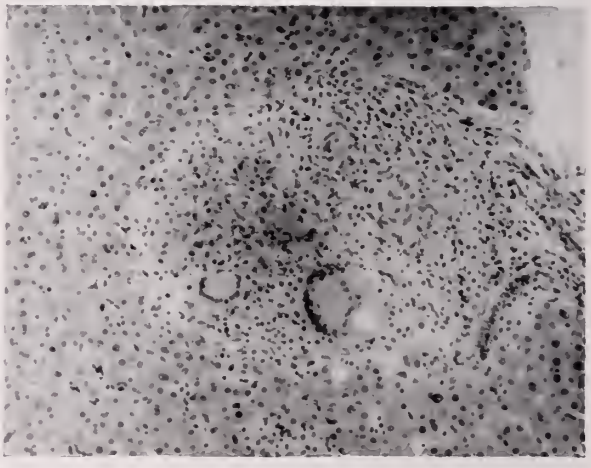


FIGURE 8
Miliary Tuberculosis

Case 9

A fifty-three-year-old woman complained of long-standing fever of three months' duration. She lost twelve pounds weight during this period and felt weak. There were no other complaints. The liver was not enlarged, but somewhat tender. The spleen was palpable. The fever was 102 degrees, the pulse 75. Hb. 10.5 g %. Leukocytes 4:500 with a normal differential picture. Urinalysis was normal. Repeated blood cultures were sterile. An agglutination test for Brucella was 1:100. On liver

needle biopsy a granuloma was found, confirming the diagnosis of Brucellosis.

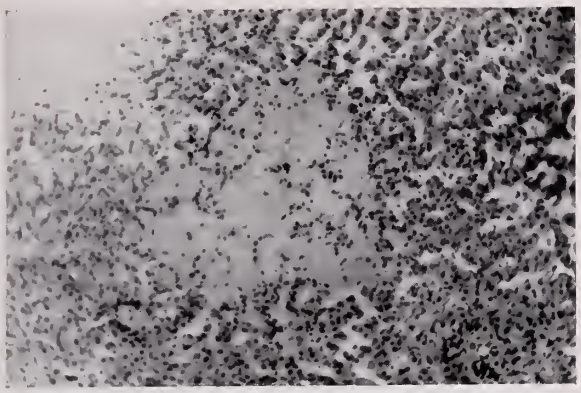


FIGURE 9
Chiari Syndrome

Case 10

A twenty-three-year-old man complained of mild jaundice and general nonspecific symptoms compatible with infective hepatitis, which we suspected clinically. The needle biopsy detected a typical granuloma of miliary tuberculosis.

The radiography of the chest was negative, but it is well known that by this means it is impossible to detect granulomata of less than two millimeters in diameter.

We saw at least four instances of this condition, which healed rapidly after antituberculous therapy. These cases of miliary tuberculosis are often benign and sometimes limited to the liver, most probably of alimentary origin.[20]

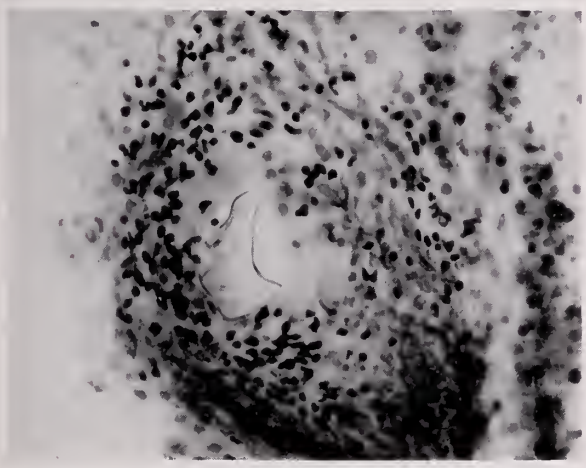


FIGURE 10
Bilharzia

Case 11

A twenty-four-year-old woman complained of sudden attacks of excruciating abdominal pain of four months' duration. Sometime during the attacks some increase in temperature and leukocytosis were observed by the family doctor. On admission the liver was huge and smooth, the spleen was somewhat enlarged and there was no ascites. Sedimentation rate was 54/90, complete blood count, urinalysis and liver function tests were normal. On liver needle biopsy a typical picture of Chiari syndrome (thrombosis of hepatic veins) was found. The large blood pools, due to the extreme liver congestion, were well visible. All over the picture the sinusoids were markedly enlarged.

We were able to collect twelve cases in Israel, and we believe that Lichtman[21] is perfectly right when he asserts that this condition must be much more frequent than generally thought and is frequently overlooked and diagnosed as liver cirrhosis, even at autopsy, if special attention is not paid to the examination of the hepatic veins. The needle biopsy of the liver is of paramount importance in these cases, as it is the easiest and most important means of establishing a diagnosis which clinically can be only suspected.

Tens of thousands of Jews of Yemenite extraction brought with them, from their country of origin, intestinal schistosomiasis. This disease is frequently milder than is usually described in textbooks and many times has been incidentally demonstrated in liver needle biopsy in unsuspected cases.

In addition we feel it necessary to stress the importance of liver needle biopsy as a tool for investigation of the activity of various enzymes,[22] the evolution of hepatic lesions,[23] and the evaluation of both the therapeutic value and the possible hepatotoxic effect of various drugs.[10,24,25,26]

Of course, there are many well-known contraindications, such as hemorrhagic diathesis and marked anemia. We never perform a liver needle biopsy unless the thrombocytes, the bleeding time and coagulation time are normal and the prothrombin activity at least 50 per cent. Prolonged obstructive jaundice is a contraindication too, as penetration of the dilated subcapsular bile ducts can easily provoke bile peritonitis. It is, therefore, general policy and our policy too, to perform a liver needle biopsy during the first three weeks from the onset of jaundice, in every doubtful case in which an obstructive factor is considered possible. Any infection of the pleura, right lower lobe of the lung, and especially within the liver, such as cholangitis, is obviously an absolute contraindication because of the possibility of provocation of generalized peritonitis. A needle biopsy must never be performed unless the liver dullness is definitely demonstrated, or radiography has been performed, in order to ascertain that no bowel interposition has occurred. A hydatid cyst of the liver is another

concluded on next page

contraindication. According to some authors,[15] a tumor can bleed rather easily after punch biopsy, and although we cannot actually consider it as a true contraindication, it is nevertheless a condition which requires special consideration. The only two cases of death that we saw were due to bleeding from liver metastases and from a hepatoma. This is seemingly unusual and most authors consider the biopsy permissible in such cases. In such instances we prefer, if possible, to use an anterior approach, which permits easy surgical intervention, if necessary.

In addition to the two fatal cases that we have mentioned, we saw only two major complications. Once a liver needle biopsy was performed on a patient in whom we did not sufficiently consider the possibility of suppurative cholangitis. A subphrenic abscess developed, which was successfully drained. This was an error of judgment, which belongs to the past: today we would never perform a liver needle biopsy in such a case.

We saw another complication in a patient in which the liver suddenly enlarged, and was tender and painful for some days, after the performance of the biopsy. We suspected a subcapsular hematoma, without proving it, as the patient recovered some days later.

In a certain number of instances, the patients complained of pains in the right shoulder or in the liver region, which we had no difficulty in relieving by free use of analgesics.

As a matter of fact, the contraindications are not frequent in clinical practice, and in most cases the procedure can be performed, but they must be very thoroughly considered and in no way transgressed.

In 1953 a combined group of the Harvard Medical School and the Boston University School of Medicine[10] reviewed over 20,000 liver needle biopsies collected from the literature and five hundred of their own, and came to the conclusion that "the true mortality is less than 1:1000 and judicious use, based on a broad understanding of liver disease, is accompanied by a minimal morbidity and a negligible mortality; less discriminate use by high morbidity and disastrous mortality. It is now apparent that the most conservative application of the method results in a mortality approaching that of other accepted procedures, such as spinal puncture and anesthesia, abdominal and pleural paracentesis, and gastroscopy."

Since then seven years have passed. We think that the additional experience and the development of the Menghini needle have further improved the outlook.

SUMMARY

Needle biopsy of the liver has been described. The literature on this subject has been reviewed. Our experience in this field has been discussed.

Bibliography

[1]Silverman, I.: A New Biopsy Needle, Am. J. Surg. 40:671, 1938
[2]Menghini, G.: The Needle Biopsy of the Liver, an Effective Technical Progress, Scientia Medica Italica, English Edition, 6:212, 1957
[3]Menghini, G.: One Second Needle Biopsy of the Liver, Gastroenterology, 35:190, 1958
[4]Menghini, G.: Two-Operator Needle Biopsy of the Liver, Am. J. of Dig. Dis., 4:682, 1959
[5]Schiff, L.: Diseases of the Liver, Philadelphia, Lippincott, 1956
[6]Schaffner, F.: The Clinical Utilization of Liver Biopsy, Med. Clin. of North Am., 44:709, 1960
[7]Braunstein, H.: Needle Biopsy of Liver in Cirrhosis, A.M.A. Arch. Path., 62:87, 1956
[8]Waldstein, S. S., Szanto, P. B.: Accuracy of Sampling of Needle Biopsy in Diffuse Liver Disease, A.M.A. Arch. Path., 50:326, 1950
[9]Wagoner, G. P.; Ulevitch, H.; Abernathy, E. L.; Gall, E. A., and Schiff, L.: Correlation of Results of Needle Biopsy of the Liver with Autopsy Findings, J. Lab. & Clin. Med., 36:1000, 1950
[10]Zamcheck, N., Sidman, R. L.: Medical Progress—Needle Biopsy of the Liver—Its Use in Clinical and Investigative Medicine, New England J. of Med., 249:1020, 1953
[11]Schiff, L.: Clinical Value of Needle Biopsy of Liver, Ann. Int. Med., 34:948, 1951
[12]Cogswell, R. C.: and others—Needle Biopsy of Liver, J.A.M.A., 140: 385, 1949
[13]Berk, J. E., Shay, H.: Liver Biopsy and Liver Function Tests: Complementary Roles in Diagnosis of Liver Disease, J.A.M.A., 148:109, 1952
[14]Mayer, J. H., and Wurl, O. A.: Liver Biopsy: correlation with Clinical Biochemical Observations, Am. J. M. Sc., 221:28, 1951
[15]Fisher, C. J., and Faloon, W. W.: Needle Biopsy of the Liver, Am. J. of Med., 25:368, 1958
[16]Kellner, T. C., and Smetana, H. F.: Artifacts in Liver Biopsies, Am. J. Clin. Path., 20:738, 1950
[17]Terry, R. B.: Needle Biopsy of Liver During Abdominal Surgery, Am. J. Digest. Dis., N.S. 4:373, 1959
[18]Giesen, C. P.; Koepsell, J. E.; Hastings, E. V., and Lindert, M. C. F.: Am. J. Dig. Dis. & Nut., 18:304, 1951
[19]Dubin, I. N.: Chronic Idiopathic Jaundice: Review of Fifty Cases, Am. J. Med., 24:268, 1958
[20]Terry, R. B., and Gunnar, R. M.: Primary Miliary Tuberculosis of the Liver, J.A.M.A., 164:150, 1957
[21]Lichtman, S. S.: Diseases of the Liver, Gallbladder and Bile Ducts, Philadelphia, Lea & Febiger, III Ed., 1953
[22]Griffiths, D. B., and Rees, K. R.: Human Liver Metabolism, Brit. M. J., 2:971, 1957
[23]Klatskin, G.: Subacute Hepatic Necrosis and Postnecrotic Cirrhosis Due to Anicteric Infections with Hepatic Virus., Am. J. Med., 25:333, 1958
[24]Stuart, K. L.; Bras, G.; Patrick, S. J., and Waterlow, J. C.: Further Clinical and Investigative Uses of Liver Biopsy, A.M.A. Arch. Int. Med. 101:67, 1958
[25]Popper, H., and Schaffner, F.: Pathology of Jaundice Resulting from Intrahepatic Cholestasis., J.A.M.A. 169:1447, 1959
[26]Schaffner, F.; Popper, H., and Chestow, E.: Cholestasis Produced by Administration of Norethandrolone., Am. J. Med., 26:249, 1959

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COMPREHENSIVE APPROACH TO THE MANAGEMENT OF DIFFICULT GASTROENTEROLOGICAL PROBLEMS

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PATIENTS WHO COMPLAIN of persistent gastrointestinal distress often are suffering from severe organic or functional disturbances, usually with psychological components. No specific pharmacologic cure is available for such disorders. Treatment must embody a comprehensive program aimed at correction of each individual abnormality of structure or function involved in the symptom complex.

Since, in the pathogenesis of inflammation and ulceration of the gastrointestinal tract, multiple factors are recognized but none is clearly understood, treatment has included various chemical and surgical measures to inhibit gastric secretion and motility, such as antacid and dietary management to neutralize gastric secretions and to protect the damaged mucosa, and hypnotics and ataraxics to influence the central nervous system and psyche. Medical treatment of gastroduodenitis has resembled, in general, the standard regimen for ulcer, but since the pain pattern is different from that of ulcer (pain-food-pain versus pain-food-relief) such management is usually ineffective. Conventional treatment of esophagitis, cardiospasm, and achalasia has been less than satisfactory; the troublesome symptoms of hiatal hernia frequently necessitate operation. Therapy of the exaggerated gastrocolic reflex generally has been discouraging; anticholinergics are not satisfactory in every case.

After diagnosis is established by roentgenography, endoscopy and appropriate laboratory studies, an efficacious and reliable ambulatory treatment is urgently needed. A short initial period in the hospital for diagnosis and initiation of treatment is indispensable in problem cases.

The first consideration is to control pain, and for this purpose a local anesthetic is needed that is powerful enough to check the pain impulses arising in the inflamed gastric mucosa, yet sufficiently nontoxic to permit ingestion in a volume adequate for dispersion over the involved areas. This idea is not new. Cocaine solutions were used empirically by mouth many years ago to relieve the pain of esophageal and gastric distress,[1] but oral administration of a topical anesthetic to act on the gastrointestinal mucosa did not receive organized study until the investigation of Bayer[2] in 1934. For relief of ulcer pain he used doses of 100 cc. of 0.25 per cent solution of an aminobenzoate, administered in the prone or right side position one hour before breakfast. If taken with an antacid there was no anesthetic effect. Procaine was first used orally for peptic ulcer in a similar manner by Hamori[3] in 1943; several later studies of such treatment were reported in the German,[4] Italian,[5] French,[6] and Indian[7] literature between 1943 and 1950. Oral solutions of procaine were also used in an attempt to abolish pyloric spasm;[8] and to relieve cardiospasm,[9] exaggerated gastrocolic reflex, and resultant bowel spasticity.[10]

Pharmacological experiments also demonstrated that various substances possessing local anesthetic properties (antihistamines,[11-13] atropine,[14,15] and procaine[15]) inhibited acid secretion in the stomach.

Certain disadvantages to oral treatment with procaine solutions soon became apparent: 1. *Unreliability of response,* which led to use of excessively large doses (Roka and Lajtha[8] administered up to 1 Gm. in a single dose). 2. *Short duration of effect* (Balfour and Wharton[10] noted relief, after a single dose of 2 oz. 2 per cent solution, for only one or two hours). 3. *Risk of sensitization,* and various other undesirable side effects. 4. *Bitter taste.*

Oxethazaine,[16] a glycine amide belonging to a different chemical series from that of the standard surface anesthetics, is described[17] as more active on the gastric mucosa than other local anesthetics and appears to be of advantage for treatment of gastroduodenitis and other intractable, nonmalignant lesions of the alimentary tract.

Local anesthesia is a function of nerve permeability;[18] loss of pain response occurs through penetration of the cells at nerve endings by an un-ionized anesthetic substance. Dissociation curves were obtained[17] on procaine, lidocaine, and oxethazaine at the pH produced by aluminum hydroxide—3.5. At this level, dissociation for procaine was almost complete; therefore, few molecules of un-ionized base would be available for nerve permeation. (This probably explains the unreliability of oral treat-

continued on next page

ment with procaine encountered by the earlier workers.) Oxethazaine, however, was significantly less ionized at the gastric pH than either lidocaine or procaine (oxethazaine was 4000 times as potent as procaine by topical application). (Table 1.) Although procaine and lidocaine were effective at the neutral or slightly alkaline pH of the esophagus, in the acid medium of the stomach secretions neither exerted significant anesthetic action.

TABLE 1
Comparison of Duration of Topical Anesthetic Effect[17,19]
% Solution — 20 to 30 minutes' duration

	Topical (rabbit cornea)
Procaine	2 (20 mg./cc.)
Lidocaine	1 (10 mg./cc.)
Oxethazaine	0.0005 (5 microgram/cc.)

Throughout a wide pH range, oxethazaine, 0.0005 per cent, appeared to remain on receptor sites longer than 2 per cent procaine or 1 per cent lidocaine.[17,19] At pH 4.5 both of these rapidly lost potency, but oxethazaine showed little alteration in duration of anesthesia with alteration of the pH of the medium. At 0.0005 per cent concentration and pH 4.5, oxethazaine exerted longer action than did 2 per cent procaine at pH 8.

The oral therapeutic dose of oxethazaine for the human patient—5 cc. of a 0.2 per cent suspension in alumina gel—provides 10 mg. of the topical anesthetic.[16]

Clinical Series

Evaluation of a comprehensive treatment program employing the oxethazaine-antacid combination for ambulatory management of refractory disturbances of the stomach and intestine was conducted, from April, 1959 to August, 1960, in a gastroenterological consultation practice. The total series comprised fifty-six patients, all of whom presented difficult, complicated gastrointestinal problems. Almost all had tried home remedies before seeking medical attention. Most had been referred by their family physicians after considerable trial of conventional treatment, with unsatisfactory results. In this study, therefore, the patients were their own controls; the results of the regimen including oxethazaine were compared with the response to previous treatment as recorded in the clear-cut, usually long established history of each case. Several patients had been hospitalized on one or more occasions and operation had been under consideration for nine. When treatment was begun all were experiencing frequent discomfort and other symptoms that interfered with their daily activities.

Oxethazaine was administered in two types of vehicle. The first thirty-six (group 1) received the standard formula, oxethazaine in alumina gel (Amphojel®);* the second group, comprising twenty patients, received an experimental combination containing oxethazaine in aluminum and magnesium hydroxides.**

Group 1. Of these patients, 61 per cent were females; 39 per cent, males. They ranged in age from 17 to 68, with an average of forty-four years. The occupations represented a typical cross section of the usual practice in internal medicine. In several patients, acute emotional disorders were associated with their gastrointestinal disturbances, for which a variety of ataraxics had been tried without success.

Seventeen reported having had symptoms for "many years," two for eighteen and twenty years, respectively; ten for two to five years, and seven for two to eight months. The diagnostic procedures included complete gastrointestinal studies. Gastroscopy and sigmoidoscopy were done when indicated.

Group 2. Of these patients, 65 per cent were females; 35 per cent, males. Their ages ranged from sixteen to eighty-four years, with an average of forty-six years. The occupations of this group also were diversified.

Seven had been ill for "many years," two for twenty-three and forty years, respectively; three for one to two years, and eight for two to six weeks. Complete gastrointestinal evaluation was carried out in all cases.

The symptoms exhibited by both groups are shown in table 2, and the diagnoses in table 3.

Dosage. Thirty-six of the total series received an initial daily dose of 8 teaspoonfuls of the oxethazaine-antacid mixture—2 teaspoonfuls administered before each meal and at bedtime. This later was reduced to 1 teaspoonful four times daily. For twenty patients the medication was started with a daily dose of 4 teaspoonfuls. Later the medication was administered to many of the patients only as required.

Associated therapy. In addition to the oxethazaine-antacid medication the treatment program included: For twenty-six patients an anticholinergic or parasympathetic inhibitor, with or without sedatives, appropriate diet, and an antacid after each meal. Four received only dietary management in addition to the local anesthetic-antacid. Most received an ataraxic, or, temporarily, a psychic stimulant, in addition to the other medication. One severely depressed patient received electroshock therapy.

The clinical response was evaluated as: (1) *Good* if there was complete relief. (2) *Fair* if there was some improvement but there were still occasional episodes of distress.

*Oxaine® (Oxethazaine in Alumina Gel), available from Wyeth Laboratories.

**Oxaine®—M, available from Wyeth Laboratories.

TABLE 2
Symptoms Presented by 56 Patients

	Group 1 no. patients	Group 2 no. patients
Epigastric, substernal or abdominal pain	28	20
Nausea, vomiting or both	17	7
Epigastric tenderness	13	2
Bleeding	6	1
Burning, bloating, belching	14	11
Regurgitation of food and water	3	2
Dysphagia	1	1
Bizarre gastrointestinal symptoms	1	1
Diarrhea, occasionally alternated with constipation	11	5
Tarry or mucous stools, and rectal discomfort	4	0
Anorexia and weight loss	3	1
Fatigue	7	5
Anxiety	4	6
Depression	2	3

TABLE 3
Diagnoses Established in 56 Patients

	Group 1 no. patients	Group 2 no. patients
Duodenal ulcer, uncomplicated	5	1
Duodenal ulcer, associated with hemorrhage, gastritis, duodenitis, cholecystitis, hepatitis, coronary insufficiency, colon irritability	7	5
Gastric ulcer, associated with duodenal ulcer, antral gastritis, esophagitis and irritable colon	4	2
Gastritis, uncomplicated	6	0
Gastritis, complicated by duodenitis, antral prolapse, cholelithiasis, diabetes, nutritional deficiency anxiety, depression	6	6
Duodenitis, complicated by cholecystitis, nephritis	0	1
Aerophagia, uncomplicated	0	1
Aerophagia, complicated by gastric hyperacidity, anxiety	3	1
Hiatal hernia, uncomplicated	1	1
Hiatal hernia, associated with colon irritability, anxiety	2	0
Esophagospasm, achalasia	1	1
Pyloroduodenal or colon irritability, associated with anxiety	1	1
TOTALS	36	20

Results

Good clinical response was achieved in twenty-three patients of group 1 and thirteen patients of group 2 (64 per cent of the total series). A *fair* result was obtained in ten patients of group 1 (one of whom had the postgastrectomy dumping syndrome) and seven patients of group 2 (31 per cent of the series). *No benefit* occurred in three patients of group 1 (5 per cent). Of the three failures, one patient had a refractory duodenal ulcer and one, a severe gastritis; both had serious emotional problems and had been treated for years with a variety of medications without relief. The third patient, who had a hiatal hernia complicated by anxiety and depression, improved on methaminodiazopoxide alone.

Status of patient at time of this report. Thirteen patients (24 per cent) were discharged after three weeks to ten months of treatment, with an average of four months, because all symptoms had subsided. There has been no relapse in any of these cases. Thirty-six patients (64 per cent) continued on reduced dosage for ten weeks to one year, with an average of six months. Two of these take oxethazaine in the aluminum and magnesium hydroxide vehicle while at home, and during working hours are maintained on an experimental combination of the local anesthetic with aluminum hydroxide and magnesium oxide in tablet form.

For seven patients (12 per cent of the total series) treatment was discontinued in three weeks to four months, in three cases because of treatment failure (5 per cent); in three (5 per cent) because they disliked the flavor; and in one (2 per cent) because of constipation.

Side effects. Constipation. Of the thirty-six

continued on next page

patients in group 1 who received the standard oxethazaine formula, nine (25 per cent of the group) reported constipation. Six patients, who had a good result, were able to continue medication with use of mineral oil. In two, both of whom had a good result, constipation was slight and they were able to complete the treatment course without laxative. One, who exhibited an excellent response in three weeks of medication, discontinued the oxethazaine-antacid mixture because of constipation, and is being satisfactorily maintained on Aludrox® administered after meals.

Taste. Three patients of group 1 (5 per cent of the total series), all suffering from chronic duodenal ulcer complicated by emotional problems, discontinued the medication because they did not care for the flavor.

Discussion

Although oral procaine occasionally had relieved pain for a brief period in some of these patients, distress invariably recurred. In all cases there was no lasting improvement until oxethazaine was added to the regimen. Operation has been indefinitely deferred for all patients for whom surgical measures had been considered. Three patients, one of whom had a duodenal ulcer, and two, who had gastric ulcer complicated by gastroduodenitis, obtained complete relief after three to five weeks of medication, and were led to discontinue oxethazaine. Pain recurred on conventional management alone in eight to ten weeks. On restoration of oxethazaine to the regimen their distress promptly subsided, and there has been no recurrence.

In dealing with difficult, complicated gastroenterological problems, one attempts, after diagnostic evaluation, to relieve the presenting symptoms by (1) appropriate diet, (2) neutralization of excess acidity, (3) control of neurogenic disturbances, and (4) providing emotional relaxation with medication and reassurance. Administration of the oxethazaine-antacid before meals, with suitable supplementary management of diet and reassurance, may be all that is necessary for some of these patients. This local anesthetic-antacid combination usually will stop pain while initial diagnostic studies are being done. The combination is most helpful in antral gastritis with prolapse of the gastric mucosa; and is a useful adjunct to the medical management of peptic ulcer, gastroduodenitis and esophagitis, hiatal hernia, exaggerated gastrocolic reflex, and achalasia. Oxethazaine in alumina gel has been of special value in gastric distress associated with diarrhea.

SUMMARY

Oxethazaine, a glycine amide, shown in laboratory studies to possess more potent local anesthetic properties, regardless of pH, than any surface anesthetic at present available, was administered orally, in two types of antacid vehicle, as part of a comprehensive therapeutic program for fifty-six patients suffering from various chronic, refractory, inflammatory lesions and ulcerations, and functional disturbances of the gastrointestinal tract, in many cases associated with emotional problems. Sixty-four per cent experienced complete remission of symptoms and 31 per cent had some relief. The local anesthetic-antacid regimen is now used almost exclusively for management of such refractory disorders. Laboratory studies that tend to explain the satisfactory clinical response to the compound are reviewed.

Constipation occurred in 25 per cent of the group who received the standard formula containing the local anesthetic in an alumina gel vehicle. In all but one case constipation was easily controlled.

References

[1]Filippi, M.: L'anesthesie gastrique peroral dans l'ulcere gastrique, Presse méd. 54:765, 1946

[2]Bayer, L.: Über die wirkung der anesthesie der magenschleimhaut auf den pförtnerkramf und auf das magengeschwür, Zentrabl. f. inn. Med. 55:577-84, 1934

[3]Hamori, A.: Die perorale novocainbehandlung des magen und duodenalgeschwürs, Ztschr. klin. Med. 142:406-13, 1943

[4]Szenes, T.: Die perorale novocainbehandlung des magenduodenalgeschwürs im lichte der röntgenalogischen beobachtung, Ztschr. klin. Med. 142:414-21, 1943

[5]Gambigliani-Zoccoli, A., and Zambelli, E.: Sulla terapia dell'ulcera gastro-duodenale con novocaina per os, Minerva med. 2:493-96, 1946

[6]Boncour, R.: Traitement de la douleur dans les ulceres gastroduodenaux, Presse méd. 1:314, 1946

[7]Thomas, T., and Kamath, M. V.: Oral Novocaine Therapy in Peptic Ulcer, Indian M. Gaz. 85:16-18, 1950

[8]Roka, G., and Lajtha, L. G.: Abolition of Pyloric Spasm by Orally Administered Procaine Solutions, Brit. M. J. 1:1174-76, 1950

[9]Balfour, D. C., Jr., and Wharton, G. K.: Oral Procaine Hydrochloride for the Relief of Cardiospasm: Preliminary report, Gastroenterol. 18:606-08, 1951

[10]Balfour, D. C., Jr., and Wharton, G. K.: Use of Procaine Hydrochloride by Mouth for Gastrointestinal Disorders, Gastroenterol. 22:257-62, 1952

[11]Wood, D. R.: Inhibition of Experimental Gastric Secretion by Histamine Antagonists, J. Physiol. 111:38p, 1950

[12]Robertson, C., and Grossman, M. I.: Inhibition of Histamine Induced Gastric Secretion by Irrigation of Antihistaminics into Gastric Pouches in Dogs, Arch. Int. Pharmacodyn. 90:223, 1952

[13]Janowitz, H. D., et al.: Inhibition of Histamine-Stimulated Secretion by Topical Application of Antihistaminics to the Canine Mucosa, Proc. Soc. Exper. Biol. & Med. 95:320, 1957

[14]Janowitz, H. D., and Hollander, F.: Effect of Atropine on Histamine Stimulated Gastric Secretion in the Dog, Am. J. Physiol. 186:373, 1956

[15]Dragstedt, L. R.: The Physiology of the Gastric Antrum, Arch. Surg. 75:552, 1957

[16]Deutsch, E., and Christian, H. J.: Chronic Gastritis, J.A.M.A. 169:2012-15, 1959

[17]Seifter, J. (Research Division, Wyeth Laboratories): To be published

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CHOLEDOCHAL CYSTS

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CONGENITAL CYSTIC DILATATIONS of the common duct, or choledochal cysts, are rarely encountered. An excellent review of all reported cases was published in 1956.[4]

Recently, an infant was admitted to the Rhode Island Hospital with this condition. There had been no previous cases at this institution.

Case Report R.I.H. No. 639551

B. A., a three-month-old white female, was admitted after, on routine examination, a cystic mass had been noted filling the right upper quadrant of the abdomen. There was no clinical jaundice, but there had been some history of pain. Stools had been intermittently green and pale. One episode of diarrhea occurred shortly after birth.

Physical examination: This was a well-developed, but thin, female infant. There was no icterus. Significant findings were limited to the abdomen where a cystic, non-tender, immovable mass about ten centimeters in diameter filled the right upper quadrant.

Laboratory data: Hemoglobin 9.7 grams, WBC 13,000 with normal differential. Urinalysis normal. Intravenous pyelogram normal.

Course: Under general anesthesia, laparotomy was performed through a transverse incision in the right upper quadrant. After mobilizing the hepatic flexure and ascending colon, a cystic mass about 10 centimeters in diameter was visualized. A non-distended gall bladder was attached to this mass by a normal calibre cystic duct. The mass was found to be a cystic dilatation of the entire common bile duct with dilatation to a lesser degree (3 cm.) of the hepatic ducts proximally to a grossly normal liver. No other congenital abnormalities were demonstrated. After 250 cc. of dark green bile had been removed from the cyst, a side-to-side choledochocystoduodenostomy was performed leaving a stoma of approximately one centimeter. A small plastic tube was inserted in the cyst proximal to the anastomosis and brought out through a stab wound as a choledochostomy. Postoperative course was uneventful except for two episodes of fever, probably secondary to regurgitation of food into the biliary system. Cholangiography through the choledochostomy tube revealed only a large cystic mass, but barium swallow revealed the choledochocystoduodenostomy to be patent with some reflux. The patient pulled out the choledochostomy tube on the ninth postoperative day.

The patient was discharged on the sixteenth postoperative day and remained somewhat "fussy" and constipated, with pale stools. About six weeks postoperatively, the stools became green and patient started to eat well and gain weight. Examination seven months postoperatively revealed a normal healthy infant with no abdominal mass palpable.

Discussion

Choledochal cysts result from some congenital deficiency in the wall of the bile ducts. They may involve all or only part of the biliary system. The cysts are not caused by obstruction but, untreated, may themselves result in obstruction with jaundice, cholangitis, and biliary cirrhosis.

The proper treatment is surgical.[2,5] No attempt should be made to remove the cyst because it *is* the patient's bile duct. An anastomosis should be made between the cyst and the small bowel. This can be performed by a simple side-to-side anastomosis with the duodenum or Roux-en-Y type procedure with the jejunum.[3] Apparently, reflux into the biliary system causes little difficulty.

SUMMARY

The case of a patient with a choledochal cyst has been presented. Current views regarding etiology and therapy have been discussed.

REFERENCES

[1]Gross, R. E.: Idiopathic Dilatation of the Common Bile Duct From Surgery of Infancy and Childhood, Philadelphia and London, W. B. Saunders Co., page 524, 1953

[2]Ravitch, M., and Snyder, G.: Congenital Cystic Dilatation of the Common Bile Duct, Surgery 44:752, 1958

[3]Swenson, O.: Choledochal Cysts. From Pediatric Surgery, Appleton-Century-Crofts, Inc., New York, page 279, 1958

[4]Tsardakas, E., and Robnett, A.: Congenital Cystic Dilatation of the Common Bile Duct, A.M.A. Arch. Surg. 72:311, 1956

[5]Warren, K., and Polk, R.: Benign Cysts of the Liver and Biliary Tract, S. Clin. North America 38:708 (June) 1958

FLEXOR CARPI ULNARIS TENDINITIS WITH CALCIFICATION

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CALCIFICATION in or about tendon structures is well known, occurring most often in the supraspinatus tendon of the shoulder. This condition is commonly miscalled "subdeltoid bursitis with calcification," although the authors can certify from personal surgical experience in several hundred cases that the calcific material is imbedded in the supraspinatus tendon substance proper.

A similar clinical entity occurs in the region of the pisiform bone in the wrist, with calcification observed on X-ray studies, accompanied by manifestations of an acute flexor carpi ulnaris tendinitis. Since the acute condition has responded satisfactorily to one of several modes of conservative therapy, scientific verification of the site of the calcific deposit has been lacking except for rare instances. Milch and Green,[1] in 1938, reported one case of surgical exploration carried out by Steindler, in which "definite lime salt incrustation was found within the sheath of the tendon (flexor carpi ulnaris), not in the tendon."

Aitken and Magill[2] reported five acute cases and one chronic case of calcareous tendinitis of the flexor carpi ulnaris. They operated upon the chronic case, finding the large calcific deposit *in* the tendon substance. Other than these two reports, the authors were unable to find any references to surgical exposure of the calcific deposits, but would conclude that the deposits are probably in the flexor carpi ulnaris tendon or peritendinous tissues, drawing on the extensive experience with the allied deposits in the shoulder and the isolated cases cited above. Seidenstein[3] made the interesting observation that in a small series of fifteen cases of flexor carpi ulnaris tendinitis, three developed acute bursitis of the shoulder simultaneously, or shortly afterward.

In our series, one patient developed an acute supraspinatus tendinitis with calcification ("subdeltoid bursitis") two years before treatment for calcified flexor carpi ulnaris tendinitis (Fig. 1c). A second patient developed similar acute shoulder disability with calcification two years following an episode of flexor carpi ulnaris tendinitis with calcification (Fig. 2a, 2b). Certain individuals appear to have a propensity for depositing calcific materials in tendinous tissues.

Etiology

Trauma, infection, and vitamin deficiency have been considered as etiologic factors. No one of these, however, will satisfactorily explain the onset of the disease process. In several cases, we have obtained a history of the performance of some unaccustomed physical act, such as prolonged "push-up" exercises, immediately preceding the onset of acute symptoms. It is evident that in most instances no prior history of trauma is available to explain the presence of calcification which has occurred in or about tendinous tissue.

Clinical Picture

The characteristic onset is a dramatic one, with sudden onset of pain in the volar aspect of the wrist, ulnar side, commonly without any history of antecedent trauma. The pain increases rapidly and may be disabling in a matter of hours. Localized tenderness in the region of the pisiform bone is marked, and this region frequently shows swelling, redness, and increased heat suggestive of infection. It is often misdiagnosed as a cellulitis of the wrist, acute osteomyelitis, or avulsion fracture, and may be treated with antibiotics, without benefit. Even finger motions become painful and limited in the acute phase, and wrist motions are markedly restricted and extremely painful.

X rays show no bony injury or deformity. A longitudinal calcific stippling from 3 mm. to 2 cm. in length is noted in the region of the pisiform bone, varying in density and extent. It is often seen most clearly in the oblique view, and this projection should be included in addition to the anteroposterior and lateral views.

Treatment

Conservative treatment has sufficed to produce a satisfactory result in the authors' experience. Infiltration with procaine and/or hydrocortone has produced satisfactory results in the hands of the authors and other observers.[4,5] Immobilization in a plaster of Paris cast (mid-palm to mid-forearm) for seven to ten days has also been of value in a series of seven cases and has been recommended by Seidenstein.[2] However, in both types of therapy mentioned a period of two to three days of severe pain has been noted in a small number of the injected or cast-immobilized patients. In addition, the transient pain produced by injection of the acutely sensitive pisiform region has been disturbing to some patients. One patient had simultaneous bilateral flexor carpi ulnaris tendinitis, and bilateral forearm casts were impractical.

In one instance in which plaster cast immobilization and codeine sulphate failed to relieve the agonizing pain after twenty-four hours, the cast was removed and X-ray therapy given by the radiologist (H. L.) produced dramatic relief of pain within twelve hours. The authors realized, of course, that this condition is almost always self-limiting and that the abrupt cessation of pain within several hours following X-ray therapy might have been coincidental. Nevertheless, it was considered worthwhile concentrating on X-ray therapy for a short series of cases, and analyzing the results, using no immobilization or other ancillary therapy which might invalidate the results and conclusions.

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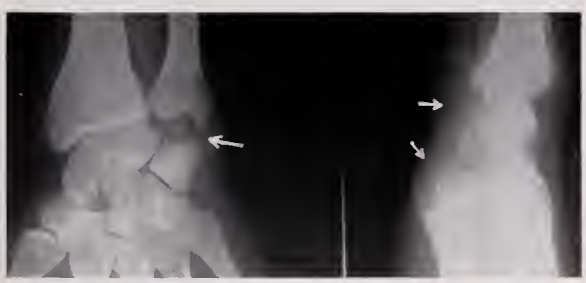


FIGURE 1a

J. G., July, 1959. Note calcifications adjacent to pisiform bone, and along course of flexor carpi ulnaris tendon.



FIGURE 1b

J. G., November, 1960. Sixteen months following therapy. Calcifications have disappeared.



FIGURE 1c

J. G., June, 1957. Large calcification adjacent to humeral head, presumably in supraspinatus tendon, two years prior to wrist disability.



FIGURE 2a

H. L., May 1958. Calcification adjacent to pisiform bone.



FIGURE 2b

H. L., August, 1960. Calcification near humeral head, with acute symptoms, approximately two years later.

X-ray Therapy

In each instance 200 R in air were administered on three alternate days for a total dose of 600 R. A small portal, measuring 3 x 3 cms., was employed, centering at the site of maximum tenderness, usually slightly proximal to the insertion of the flexor carpi ulnaris tendon. 200 K.V.P., 20 M.A., 50 T.S.D., .5 mm. CU Filter were the factors employed. As occurs occasionally in the treatment of acute tendon calcification elsewhere in the body, on the evening of the first treatment, a mild increase in the local symptoms occurred in several instances. However, by the following morning, in every patient a gratifying improvement in symptoms resulted. From this point on, improvement was so marked that no adjunct to radiotherapy was necessary. In no case was more than 600 R or three treatments given or needed therapeutically. No exacerbation, even with resumed activity, was encountered.

Analysis of Cases

A series of thirteen cases of flexor carpi ulnaris tendinitis with calcification, treated by X-ray therapy alone, is presented. Patients ranged in age from twenty-seven to sixty-three years, with an average age of forty-nine years. One male, age sixty-three, had bilateral acute wrist involvements. There were six males and seven females. Etiology was obscure. In two cases, unusual physical activity involving the wrist appeared to precipitate the acute symptoms.

Two of the patients who were treated with radiation therapy were re-X rayed subsequently to observe any change in the calcium deposits. Both patients were asymptomatic and clinically "cured." In one (J. G.), sixteen months following therapy, no calcifications were present (Figures 1a, 1b). In the other patient (I. P.), nine weeks following radiation therapy, slight residual calcification was noted (Figures 3a, 3b).

CONCLUSION

1. Flexor carpi ulnaris tendinitis with calcification is a painful self-limited clinical entity whose etiology is not well understood. It is frequently confused with inflammatory disease, but may be readily diagnosed by its local symptoms and characteristic X-ray appearance.

2. Many modalities have been successfully employed in treatment of this condition. It is our opinion, as well as that of other writers,[6,7] that X-ray therapy, which is safe and easily administered, provides prompt amelioration of symptoms. Although experience is limited to thirteen cases in this series, radiation therapy is currently employed as the treatment of choice in our hands.



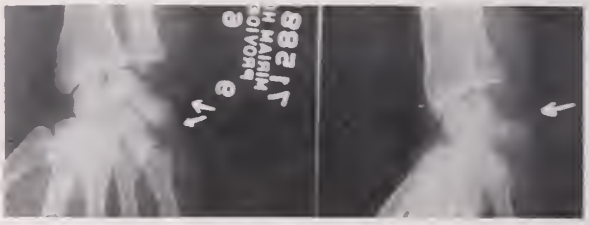


FIGURE 3a

I. P., September, 1960. Stippled calcification adjacent to pisiform; note longitudinal course on lateral view.

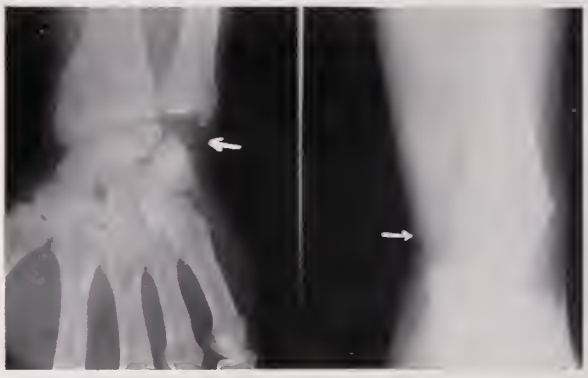


FIGURE 3b

I. P., November, 1960. Slight residual calcification noted, nine weeks following X-ray therapy. Patient asymptomatic.

Bibliography

[1]Milch, H., and Green, H. H.: Calcification about the Flexor Carpi Ulnaris Tendon, Arch. Surg. 36:660, 1938

[2]Aitken, A. P., and Magill, H. K.: Calcareous Tendinitis of Flexor Carpi Ulnaris, New Eng. J. Med. 244:434, 1951

[3]Seidenstein, H.: Acute Pain in the Wrist and Hand Associated with Calcific Deposits, Report of 15 cases, J. Bone & Joint Surg. 32 — A, 413, 1950

[4]Lapidus, P. W.: Infiltration Therapy (with Procaine Hydrochloride Solution) of Acute Tendinitis with Calcification, Surg. Gynec. & Obstet. 76:715, 1943

[5]Yelton, C. L., and Dickey, L. E.: Calcification about the Hand and Wrist, Southern Med. Journal 51:489, 1958

[6]Cowan, I. J., and Stone, J. R.: Painful Periarticular Calcifications at the Wrist and Elbow; Diagnosis and Treatment. J.A.M.A. 149:530, 1952

[7]Sosman, M.: Personal communication

Editorials

THE CRYPTO-DIABETIC

The detection of obscure diabetes mellitus has occupied the attention of the medical profession for many years. There has been a recent intensification of organized effort aimed at case finding, a program which certainly deserves vigorous support. It is our impression, however, that the problem of detection is considerably more difficult and complex than the public relations approach would indicate, and that readily discovered cases of diabetes represent merely the visible portion of the iceberg. Without questioning the desirability of periodic urine examinations, it should be realized that many diabetics remain undetected by this means, and indeed that many remain undetected even in the face of elaborate but uncritical medical studies.

This problem has been on our mind considerably recently because of a rather alarming success over a period of years in uncovering diabetes in patients in whom the disease had apparently been excluded by routine urine and fasting blood sugar studies.

A number of investigators have been similarly concerned. In answer to a recent inquiry in the Journal of the American Medical Association on this very question, Doctor Harry Blotner stated: "In general practice, if glycosuria is discovered on routine examination, all too often fasting blood sugar-level and urine sugar-level determinations are ordered. If the results are normal, it is assumed that the patient does not have diabetes. Such a procedure has been the cause of overlooking many mild cases of diabetes." He points out that many thousands of cases of diabetes among selectees would have been missed if this procedure had been followed. Blotner recorded this concept as much as fifteen years ago.

We are primarily concerned in the present remarks with those crypto-diabetics who repeatedly exhibit a sugar-free urine and a normal fasting blood sugar but have disease suggestive of diabetes. In 1952 Stanford Wessler stated: "Since the severity of the diabetic state is not related to the development of gangrene and since in several patients the metabolic defect was recognized only after examination of the blood sugar, diabetes should be suspected in every patient with peripheral arteriosclerosis. It is only in this way that any possible benefits from good management can be realized." Ellenberg more recently has emphasized that the clinician may be confronted with the same dilemma in dealing with neuropathies; he was not always able to find a correlation between neuropathy and the duration or severity of the diabetes. Indeed in a small number of cases neuropathy was the first manifestation of diabetes, unattended by hyperglycemia or glycosuria. In these instances, the diabetes was discovered only upon performance of a glucose tolerance test.

Beaser, as well as Blotner, has affirmed the desirability of adopting a postprandial blood sugar test as the norm, in place of the now traditional fasting blood sugar. Blotner advises, as the routine study, determination of the blood sugar one hour after a heavy carbohydrate meal or 100 grams of glucose, at which time the glucose peak in the blood usually occurs. Yet in some cases, as Beaser has stressed, there is no shortcut for a full glucose tolerance curve. He states, in fact, that if a shortening of the procedure is desirable, the test sample most safely eliminated, is the fasting specimen.

We should like to summarize these thoughts in the following way. Every patient with arteriosclerotic disease not otherwise known to be a diabetic should have, at the very least, a postprandial blood sugar test. If this is not definitive, a glucose tolerance curve should be done. These studies should be routine without exception for every patient manifesting peripheral arterial occlusive disease or unexplained infections. This concept can logically be extended to patients with unexplained neuropathy, suggestive, but unexplained retinopathy, and renal disease.

It is about time that the fasting blood sugar be relegated to the realm of medical history.

References

[1]Blotner, H.: Diabetic Screening (Questions and Answers), J.A.M.A. 174:2001, (Dec.) 1960

[2]Blotner, H.: Studies in Glycosuria and Diabetes Mellitus in Selectees, J.A.M.A. 131:1109, 1946

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[3]Ellenberg, M.: Diabetic Neuropathy: Considerations of Factors in Onset. Ann. Int. Med. 52:1067, (May) 1960
[4]Beaser, S. B.: Diabetes Mellitus. New England J. Med. 247:353, 1952
[5]Wessler, S.: Studies in Peripheral Arterial Occlusive Disease. II. Clinical Findings in Patients with Advanced Arterial Obstruction and Gangrene, Circulation 7:810, 1952

MEDIC-ALERT



Forty-thousand patients across America now wear a medic-alert bracelet or disc engraved on the reverse in telegraphic prose: "allergic to horse-serum," "epilepsy," "diabetes," "hemophilia," or "I am taking anticoagulants." In an emergency or with stranger patients these capsule histories may provide the hard-pressed physician with rapid orientation he will surely welcome. Certainly the plan developed by the Medic-Alert Foundation of Turlock, California, represents a response to a genuine public need attested to by all those who have mailed five dollars for membership and received their emblem.

The Medic-Alert Foundation, started in 1956, now operates as a nonprofit organization and employs seventeen paid workers. The organization maintains a numerical card file containing medical information and identification data on members, available on a twenty-four-hour basis by collect telephone call to Turlock, California, MErcury 4-4917. The emblems, mailed to members, are of either sterling silver or stainless steel and may be had in one of three forms: as a bracelet, a disc on a lady's charm bracelet, or a disc with twenty-four-inch chain for neckwear. A choice of seventeen standard inscriptions is available, but three additional lines may be added at an extra cost of fifty cents the line. This then is the dog-tag which worked so well in the Services, prettied up for the ladies and adapted to civilian use. It is a great improvement over the cards so many diabetics have carried and often lost in the past. The Medic-Alert Foundation, for its manifest public service, merits the support of physicians everywhere.

MAKING MEDICINE MORE ATTRACTIVE

College graduates of top-grade academic standing have been a progressively smaller and smaller proportion of those students who choose a medical career as their life work. Studies by the Association of American Medical Colleges bear this out. Furthermore, the number as well as the apparent quality of students who wish to become physicians has been decreasing in recent years.

To explain this situation one can cite on the one hand the increasing cost and long duration of the educational experience that leads to a medical degree and on the other hand the lower cost and earlier achievement of financial independence promised in other fields, particularly in the technical application of various types of engineering.* An attempt to bring undergraduate medical education within the reach of a larger number of the best of the students in our universities is certainly in order. This the American Medical Association is planning. At its recent meeting in Washington "The House of Delegates approved a scholarship and loan program proposed by the Special Study Committee of the Council on Medical Education and Hospitals." The following statement by the reference committee was also approved. "This proposed program will provide concrete evidence of the American Medical Association's sincere desire to attract increasing numbers of well-qualified young people to enlarge the ranks of our profession. Your reference committee recognizes that the program is wisely designed to allow for its enlargement through the support of individual physicians and other groups. Your reference committee was impressed with the enthusiastic support of this proposal indicated during the course of the discussion. There was indicated a desire that in the final formulation of the administrative details of this program, provision be made for widespread participation by individual physicians as well as county and state medical societies. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with this Association's belief in individual responsibility."

In view of the statement that "widespread participation" is suggested, it seems appropriate that the Rhode Island Medical Society and its constituent county organizations should take cognizance of the situation and consider what can be done locally to aid in the implementation of this excellent plan.

*Figures compiled by the Association of American Medical Colleges show that the average cost of four years of Medical School to the students in the 1959 graduating class in the United States was $11,642.

NEEDLE BIOPSY

Needle biopsy of tissues and organs has been utilized in various clinics in this country for many years. The development of the Silverman needle appeared to have enhanced greatly the effectiveness of this procedure as compared to the old-fashioned aspiration biopsy. Doctor Chester Jones of Boston demonstrated the value of needle biopsy of the liver in the diagnosis of disease of that organ and advocated its wide adoption. The group at Memorial Hospital in New York have given extensive use to this method for taking biopsies from solid tumors, notably in the breast and neck. Yet the method has never gained widespread acceptance. In most areas of the country the Silverman needle has been used only sporadically. In the case of the liver there has been fear of hemorrhage, and in the case of solid tumors, particularly where operable, there has been concern over the seeding of tumor cells. Casting his shadow over all has been the brooding figure of the pathologist, complaining of the pathetic broken crumbs of tissue, inadequate for decent examination.

The development of a new and ingenious aspiration needle by Menghini in Italy seems to have changed this picture. This new needle has facilitated strikingly the ease, speed, and safety with which needle biopsies may be taken and subjects the patient to a minimum of discomfort. Even more important, pathologists are very favorably impressed with the adequacy of the specimens for diagnostic evaluation.

Published elsewhere in this issue is an excellent report of an extensive experience with this needle, gathered by Doctor Eldad Azkireli of the state of Israel, a recent visitor in this state. Although there had been a small and favorable experience locally with the Menghini needle, the main impetus in this area came from the excellent and impressive presentation of the new diagnostic tool by Doctor Azkireli.



STATE CURATIVE CENTRE BECOMES THE DR. JOHN E. DONLEY REHABILITATION CENTRE

Governor John A. Notte signs legislation renaming the State Curative Centre in honor of Doctor John E. Donley, its medical director for fifteen years, and a former president of the Rhode Island Medical Society, and editor of the Rhode Island Medical Journal.

Watching the Governor sign the legislation are, left to right: J. Austin Carroll, member of the Centre Advisory Board, Jerome McGeharty, member of Centre staff, Dr. Stanley Sprague, member of the Advisory Board, Dominic DiNunzio, member of Centre staff, Clifford J. Cawley, state director of labor, Mrs. John E. Donley, John E. Farrell, executive secretary of the Rhode Island Medical Society, Edward S. Farrell, deputy director of labor, and Anthony DiPinto, executive assistant, State Curative Centre.

REPORT OF THE PRESIDENT

to the Corporation of the Rhode Island Medical Society Physicians Service at Its Twelfth Annual Meeting, at Providence, Rhode Island, January 25, 1960

CHARLES J. ASHWORTH, M.D.

It may seem paradoxical, even contradictory, to state at this twelfth Annual Meeting of the Corporation of Physicians Service that the year 1960 was a success, particularly when the treasurer's report showed a deficit of $109,000.

Despite this dollar-and-cent loss, a brief review of our accomplishments will be convincing proof that the year was, in final analysis, successful, and the financial deficit presents no serious threat to the operational stability of the Plan.

On the plus side, among other things, we look back upon the adoption of revised income limits and becoming an official Blue Shield plan.

Physicians Service led the nation in the percentage of enrollment among federal employees, 86%, as indicated by the latest U.S. Civil Service Commission report. This means that 86% of the federal workers in Rhode Island selected Blue Cross and Physicians Service. Less than 6% chose the plan underwritten by the Aetna Insurance Company, and the remaining 8% was spread among the various other plans available. Including federal workers and dependents, this group represents over 27,000 Rhode Islanders. Nationally, 2,800,000 (54% of the total) selected Blue Cross-Blue Shield.

Another significant result of the enrollment was the selection of higher benefit programs by the federal workers. Offered a choice between a high and low benefit program under most plans, the higher benefit program was chosen by about 80% of the employees. Thus, the largest group in the nation indicated a preference for comprehensive health protection and a willingness to pay the necessary cost for better benefits.

Our total number of subscribers increased by 18,144 during 1960, while the number of firms purchasing Physicians Service for their employees jumped from 1,243 to 1,321, an increase of 78. It is further significant that although a year ago anxiety in certain areas portended a marked reduction in the number of participating physicians, the total at the end of 1960 was 30 more than in 1959, that is, 967 as against 937. These figures certainly reflect confidence, not only on the part of the buying and subscribing public, but on the part of the participating doctors whose professional contributions make this Plan possible.

Surgical-medical benefits provided for subscribers last year totaled $7,958,206, or an increase of almost $1,000,000 ($978,028) over the previous year.

Membership rose to a new high, 577,903, or over 70% of the eligible population in Rhode Island, a record which leads the nation among statewide Blue Shield plans; and again, the lowest administrative expense ratio in the nation among similar plans was recorded, 5.5% or 0.2% lower than 1959. There are now over 134,000 members under Plan B.

A brief résumé of other fields of development shows that inclusion of handicapped children over age 19 under regular family membership, and the introduction of a special contract with reduced rates for college students. This was inaugurated in August, and more than 1,100 were enrolled under the student contract by the end of the year.

The issue of the over-65 element of our population will remain uncertain, pending Congressional action. A study this year by our actuary, Mr. Clapp, showed that 77% of the self-supporting population over age 65 in this state is protected by Physicians Service. This is significant testimony to the community contribution of the Plan.

At the suggestion of the Medical Economics Council, on which Physicians Service has representation, the Rhode Island Medical Society recommended the appointment of utilization committees in the major hospitals in Rhode Island. It is hoped that the combined efforts of Blue Cross-Blue Shield, the Rhode Island Medical Society and the Hospital Association of Rhode Island will be successful in bringing about certain economic improvements in the fields of health and hospital care as has been accomplished by similar groups in other states.

Results of the recent survey of doctors, which will be presented in detail by a later speaker, are not only informative and instructive, but complimentary to the carefully expressed thoughts of all respondents. It reveals the dedication of our doctors to insure the success of this Plan, the majority of whom feel that Physicians Service is achieving its basic objectives with excellence and satisfaction. With the analysis of available figures still incomplete, it is already obvious that this initial "person-

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RHODE ISLAND MEDICAL SOCIETY PHYSICIANS SERVICE

Report of the Twelfth Annual Meeting of the Corporation, January 23, 1961

THE TWELFTH ANNUAL MEETING of the Corporation of the Rhode Island Medical Society Physicians Service was held in the Garden Room of the Sheraton-Biltmore Hotel in Providence on January 23, 1961. At the conclusion of dinner, the Corporation was called to order for its business meeting by the president, Doctor Charles J. Ashworth, at 8:25 P.M. The following members of the Corporation were in attendance:

Samuel Adelson, M.D.
Charles J. Ashworth, M.D.
John T. Barrett, M.D.
J. Murray Beardsley, M.D.
Chelcie C. Bosland, Ph.D.
J. Robert Bowen, M.D.
Bertram H. Buxton, Jr., M.D.
Mr. J. Austin Carroll
Mr. George W. Chaplin
Philomen P. Ciarla, M.D.
Harry E. Darrah, M.D.
Michael DiMaio, M.D.
Frank W. Dimmitt, M.D.
Mr. James R. Donnelly
Frederick C. Eckel, M.D.
Peter Erinakes, M.D.
Mr. Emil E. Fachon
Charles L. Farrell, M.D.
Frank D. Fratantuono, M.D.
Henri Gauthier, M.D.
J. Merrill Gibson, M.D.
John F. W. Gilman, M.D.
Scebert J. Goldowsky, M.D.
Stanley Grzebien, M.D.
Edmund T. Hackman, M.D.
Mr. John J. Hall
John C. Ham, M.D.
Arthur E. Hardy, M.D.
Harry Hecker, M.D.
Alexander Jaworski, M.D.
Earl F. Kelly, M.D.
Robert V. Lewis, M.D.
Frank J. Logler, M.D.
Frank MacCardell, M.D.
William MacDonald, M.D.
Earl J. Mara, M.D.
Frank I. Matteo, M.D.
James A. McGrath, M.D.
William S. Nerone, M.D.
Francis W. Nevitt, M.D.
Arnold Porter, M.D.
Alfred L. Potter, M.D.
Ralph Richardson, M.D.
Francis B. Sargent, M.D.
Jack Savran, M.D.
Carl S. Sawyer, M.D.
Stanley D. Simon, M.D.
John Turner, M.D.

Also present were many members of the Claims Committee of Physicians Service and also the following: Mr. Stanley H. Saunders, executive director of Physicians Service, Mr. Edgar H. Clapp, associate executive director, John E. Farrell, SC.D., executive secretary, Mr. William E. McCabe, legal counsel, Mr. Arthur Hanley, assistant executive director of Blue Cross, Mr. J. Lewis Eddy, director of claims, Mr. Frank Addae, director of Public Relations, and Mr. George Peterson, assistant claims manager, and also Mr. Robinson Trowbridge of the advertising agency, Creamer, Trowbridge and Case, Inc.

Annual Report of the Secretary

Doctor Charles L. Farrell, secretary, read his annual report, copy of which was included in the handbook submitted to the members of the Corporation in advance of the meeting and which is made part of the official record of this meeting.

Action: It was moved that the annual report of the secretary be received and placed on file. The motion was seconded and adopted.

Annual Report of the Treasurer

Mr. James R. Donnelly, treasurer, read his annual report, copy of which is made part of the official record of this meeting.

Action: It was moved that the annual report of the treasurer be received and placed on file. The motion was seconded and adopted.

Report of the President

Doctor Charles J. Ashworth, president, read his annual report on the progress of Physicians Service during 1960. (Copy of this report is made part of the official record of this meeting.)

Action: It was moved that the report of the president be received and placed on file. The motion was seconded and adopted.

Citation to the Secretary

Doctor Ashworth noted that Doctor Charles L. Farrell, an incorporator of Physicians Service and a member of its board since 1949, and secretary in 1959-1960, was concluding his service at this meeting. For the Board of Directors he presented to Doctor Farrell an engraved citation citing him for his outstanding service to the Corporation.

Doctor Farrell expressed his appreciation for the honor accorded him, and he commented on the problems that are faced by the Board of Directors, all of whom he praised for their service in the interest of the progress and development of the Voluntary Plan.

Report on Opinion Survey

Mr. Robinson Trowbridge, of the firm Creamer, Trowbridge and Case, Inc., of Providence, reported on a survey of the medical profession of the state relative to its knowledge and criticism of the Physicians Service program. He stated that over 900 questionnaires were distributed, and there has been a usable return of almost 50% of them. He read the results of the survey and distributed to the

continued on next page

members of the Corporation a summary of the answers indicating the significance of the study. Copy of the report on the significance of the survey answers is made part of the record of this meeting.

Federal Employees Health Benefits Program

Doctor Philomen Ciarla made inquiry regarding the provision of X-ray coverage under the Federal Employees Health Benefits Program in Rhode Island.

Mr. Saunders, executive director, explained how X-ray coverage was proposed in the initial contracts submitted by the National Blue Shield Plans which resulted in the development of local literature offering such coverage. However, a fourth and final national contract eliminated X-ray coverage in the doctor's office in order to make the voluntary plans competitive with those of the insurance industry. Since this action came after Physicians Service had made commitments for X-ray coverage to federal employees in Rhode Island, both Blue Cross and Physicians Service, by action of their Board of Directors, had voted to absorb the loss until a new contract can be resolved in October, 1961.

Discussion on the Self-Adjusting Rating Plan

The question was raised regarding the change to a self-adjusting rating plan which would have a serious effect on the premium paid by the person over the age sixty-five.

The executive director reviewed the problem, pointing out the difference between a community rating plan and a self-adjusting rating plan. He indicated that only groups of fifty or more are on the self-adjusting basis, and groups in lower numbers are combined to arrive at an equitable rate for them. He indicated that for the older age person the highest increase in premium was for the 20-dollar plan.

Adjournment

The business of the Corporation completed, the meeting was adjourned at 10:05 P.M.

Respectfully submitted,
CHARLES L. FARRELL, M.D., *Secretary*

Report of the Treasurer
Rhode Island Medical Society — Physicians Service

Condensed Statement of Condition

Rhode Island Medical Society — Physicians Service as of December 31, 1959 — 1960

	Dec. 31, 1959	*Dec. 31, 1960*
Assets		
Cash and Due from Banks	$ 161,569.30	$ 88,578.06
Accounts Receivable	670,986.50	752,452.75
U. S. Government Securities	2,747,779.25	2,749,163.80
	$3,580,335.05	$3,590,194.61
Liabilities		
Accounts Payable	$ 660,701.78	$ 665,982.54
Accrued for Claims	1,055,581.00	1,245,543.00
Unearned Subscriptions	324,128.15	293,111.55
	$2,040,360.93	$2,204,637.09
Reserves		
Reserve for Excess Losses	$ 539,974.12	$ 385,557.52
Statutory Reserve	1,000,000.00	1,000,000.00
TOTAL RESERVES	$1,539,974.12	$1,385,557.52
TOTAL LIABILITIES AND RESERVES	$3,580,335.05	$3,590,194.61
Statement of Earnings		
INCOME		
Received from Subscribers	$7,094,142.86	$8,227,272.58
Income from Investments	76,801.99	82,001.98
TOTAL INCOME	$7,170,944.85	$8,309,274.56
EXPENSES		
Claim Payments	$6,980,177.98	$7,958,206.12
Operating Expenses	409,385.10	460,162.04
TOTAL EXPENSES	$7,389,563.08	$8,418,368.16
NET LOSS CHARGED TO RESERVES	$ 218,618.23	$ 109,093.60

A few comparisons with the figures of the previous year are as follows:

We have 577,903 subscribers or 72.2% of the eligible population of the state of Rhode Island. This is the first full year of experience with the "B" plan and 23% of the total subscribers have it.

Gross income of $8,309,274.56 reached an all-time high and represents an increase of $1,138,329.71 or 16% more than last year. This remarkable increase in gross income was due to the upgrading of many "A" contracts to the more expensive "B" contracts and to approximately 18,000 new subscribers.

The increased gross income was offset by claims amounting to $7,958,206.12; an increase of $978,028.14. Claims represent 95.8% of income.

Operating expenses went up $50,776.94 to a total of $460,162.04 or 5.5% of income, considered one of the lowest rates in the country.

Net loss was $109,093.60 as compared with a loss of $218,618.23 for the previous year. This is the second year that we have operated at a loss.

Investment account remains about the same at $2,749,163.80.

Reserves of $1,385,557.52 are $154,416.60 lower and are sufficient to cover 2.8 months of claims. National Blue Shield requirement is three months.

We sustained losses for the first nine months, but some improvement was noted in the remaining three months, when the new system of rates went into effect. The formula under which we now operate appears to be fairly adequate to allow a small margin of profit in the coming year.

Respectfully submitted,
JAMES R. DONNELLY, *Treasurer*

REPORT OF THE PRESIDENT OF PHYSICIANS SERVICE

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to-person" approach will yield invaluable help in further development of the Plan and formulation of policy.

This year, then, complex as it may have been with difficult decisions and the courage to make them, can be best characterized as a striking example of what one year of time is,—a measure of change. One year ago, I reminded you of two problems that would beset us; one, meeting the requirements for eligibility to participate in the coverage of federal employees; and two, completion of plans for extended coverage beyond our basic A and B Plans. The former is in the past; you have met it with decisive vigor, and the wisdom of your choice is reflected in the accomplishments previously mentioned. The latter still awaits us, but its availability and actual operation, I am confident, will be realized this year since, at the moment, no impediment to this end can be foreseen.

Continued emphasis will be placed this year upon informational exchange and interchange between members of the Corporation, members of the entire profession, and the Board. Initiation of efforts along this line will engender a better understanding and lessen, if not eliminate, confusion.

Twenty years ago, the medical profession responded to the challenge of national compulsory health insurance by developing Blue Shield. Today, a similar challenge faces us in the proposal to utilize the Social Security System for the purpose of underwriting medical care for the over-65 members. It is quite possible that this new technique can be met in 1961 as the old one was, by our profession meriting the continued support of subscribers under Physicians Service enrollment, together with 47 million other citizens enrolled in Blue Shield.

Without question some sacrifice will be necessary, but it will be less if it succeeds in keeping not only doctors, but patients from the domination of political control in the field of medical care. We not only have a good Plan, but one of the very best, and I know you share my earnest hope to keep Physicians Service in this category. It continued to lead the nation in percentage of state population enrollment and lowest operating cost.

Again, may I thank the Board of Directors for their efforts and their support throughout the past year. As usual, the executive and administrative staffs, under the able direction of Stanley H. Saunders, has made an outstanding contribution to the progress of this year. Our appreciation extends to all doctors who, in any way, have helped in achieving this success, the Claims Committee and Professional Advisory Committee, and all committees for their help in completing the routine work of the Board which, incidentally, is not lessening.

As an official item in the permanent record of this 12th Annual Report, permit me a word of special thanks to the secretary of the Board, Doctor Charles L. Farrell, who, this evening, terminates a decade of unselfish effort in promoting the aims and ideals of voluntary health insurance in general and our Physicians Service, in particular. His zeal and hard work might well become the pattern for the future in meeting and solving the never-ending problems of a voluntary plan.

It is now my personal privilege, on behalf of the Board and with the Board's authorization, to present this scroll as a memento of the esteem and gratitude in which Doctor Farrell is held.

Check . . .
MAY 2 and 3, 1961
150th MEETING
Rhode Island Medical Society

HOUSE OF DELEGATES
of the
RHODE ISLAND MEDICAL SOCIETY
Report of Meeting, February 1, 1961

A MEETING of the House of Delegates of the Rhode Island Medical Society was held at the Medical Library on Wednesday, February 1, 1961. The meeting was called to order by the president, Doctor Earl J. Mara, at 8:07 P.M. The following were in attendance:

Bristol County: Robert W. Drew, M.D. Kent County: Peter C. Erinakes, M.D. Newport County: Philomen Ciarla, M.D.; Charles Dotterer, M.D. Pawtucket District: Alexander Jaworski, M.D.; Earl Kelly, M.D.; Harry Hecker, M.D.; Bencel Schiff, M.D. Washington County: Hartford P. Gongaware, M.D.; Freeman B. Agnelli, M.D. Woonsocket District: Joseph A. Bliss, M.D.; Saul A. Wittes, M.D. State Health Dept. Director: Joseph E. Cannon, M.D.* Officers of the RIMS (other than delegates): Earl J. Mara, M.D.; Frank W. Dimmitt, M.D.; Samuel Adelson, M.D. Immediate Past President of RIMS: Alfred L. Potter, M.D. Providence Medical Association: John T. Barrett, M.D.; J. Robert Bowen, M.D.; Bertram H. Buxton, Jr., M.D.; Wilfred I. Carney, M.D.; Michael DiMaio, M.D.; William J. H. Fischer, Jr., M.D.; Henry B. Fletcher, M.D.; Frank Fratantuono, M.D.; J. Merrill Gibson, M.D.; John F. W. Gilman, M.D.; Seebert J. Goldowsky, M.D.; Stanley Grzebien, M.D.; Robert V. Lewis, M.D.; Frank C. MacCardell, M.D.; William J. MacDonald, M.D.; Frank I. Matteo, M.D.; William S. Nerone, M.D.; Arnold Porter, M.D.; William A. Reid, M.D.; Ralph D. Richardson, M.D.; Carl S. Sawyer, M.D.; Stanley D. Simon, M.D.; John Turner II, M.D.

Also present were Peter Mathieu, M.D., chairman of the Social Welfare Committeee; John E. Farrell, SC.D., executive secretary; F. B. Sargent, M.D., chairman, Grievance Committee, and Robert W. Riemer, M.D.

MINUTES OF PREVIOUS MEETING

The president noted that the minutes of the September, 1960, meeting of the House of Delegates had been sent to each delegate and had been published in the Medical Journal.

Action: It was moved that the September, 1960, minutes of the House of Delegates be approved and placed on permanent file. The motion was seconded and adopted.

*Without the power of vote.

REPORT OF THE PRESIDENT

Doctor Mara read a communication from Doctor E. Vincent Askey relative to developments concerning medical and health care as viewed from the national level. Doctor Askey is president of the A.M.A.

Doctor Mara reported that the Council had authorized him to appoint a committee on the prevention and treatment of athletic injuries and he is, therefore, naming as the committee the following: A. A. Savastano, M.D., *chairman;* G. Edward Crane, M.D.; William J. Schwab, M.D.; Edwin B. O'Reilly, M.D.; Salvatore J. P. Turco, M.D., and Charles J. Hutchinson, M.D.

Doctor Mara also announced that Doctor Chafee had resigned as general chairman of the Sesquicentennial Committee due to illness and, therefore, he had appointed Doctor Thomas Perry as general chairman of the committee.

REPORT OF THE SECRETARY

In the absence of the secretary, the president noted that his report had been published in the handbook distributed to the delegates.

Action: It was moved that the report of the secretary be received and placed on file. The motion was seconded and adopted.

* * *

Doctor Earl F. Kelly discussed item #1 of the secretary's report and reviewed the proposal from the viewpoint of the Rhode Island Heart Association.

Doctor Mara relinquished the chair to Doctor Dimmitt, the vice president, and then he personally reviewed the hearing on the subject as presented by Doctor Vose to the Council at its meeting in September.

Doctor Kelly presented the following resolution:

RESOLVED, that the House of Delegates give permission to members of the Society to prescribe penicillin to their patients for prophylactic prevention of rheumatic fever and rheumatic heart disease only, the penicillin to be supplied by the Rhode Island Heart Association at a nominal cost with no profit to any person or individual.

Action: Doctor Dimmitt called for a voice vote on the resolution. The motion for adoption of the resolution was defeated.

REPORT OF THE TREASURER

The president noted that the annual report of the treasurer was included in the handbook of the delegates.

Action: It was moved that the report of the treasurer as submitted be approved and placed on file. The motion was seconded and adopted.

Board of Directors of Physicians Service

The president noted that the House would nominate four members to serve for three-year terms on the Board of Directors of the Rhode Island Medical Society Physicians Service.

The following members of the Society were placed in nomination: Doctors William J. Butler, Wilfred Carney, Frederick Eckel, Thomas Forsythe, Henri Gauthier, K. W. Hennessey, Waldo Hoey, A. Jaworski, F. J. Logler, G. A. Motta, Meyer Saklad, and Stanley D. Simon.

Doctor Mara appointed Doctors Charles Dotterer and Bencel Schiff as tellers for the written ballot.

The four physicians receiving the highest number of votes were the following: Doctors Eckel, Gauthier, Hoey, and Logler.

Action: It was moved that Doctors Eckel, Gauthier, Hoey, and Logler be declared the nominees of the House of Delegates as directors on the Board of Directors of the Rhode Island Medical Society Physicians Service. The motion was seconded and adopted.

Resolution from Kent County

A resolution adopted by the Kent County Medical Society at its December 7, 1960 meeting was included in the handbook to the delegates.

Action: It was moved that the resolution be received and placed on file. The motion was seconded and adopted.

* * *

A motion was made: That the House of Delegates of the Rhode Island Medical Society instruct its delegate and alternate delegate to the American Medical Association to vote in favor of social security coverage for physicians if such a resolution comes before the House of Delegates of the American Medical Association. The motion was seconded and passed.

New England Postgraduate Assembly

A report on the New England Postgraduate Assembly was included in the handbook to the delegates, and it was discussed by Doctor Francis B. Sargent, president of the Council of the New England Medical Societies. At the conclusion of the discussion, it was agreed that the president should appoint a member of the Society to serve on the program committee for the New England Postgraduate Assembly and it was moved:

That the Rhode Island Medical Society agree to be a co-sponsor of the New England Postgraduate Assembly to be held in Boston in November, 1961. The motion was seconded and adopted.

Communications

The executive secretary read a memorandum from the Communications Division of the A.M.A. regarding a Columbia Broadcasting System television program scheduled for the evening of Thursday, February 2, on the subject of *The Business of Health—Medicine, Money and Politics.* The memorandum urged members of the medical profession to view the program and to communicate their opinion of it to CBS.

Recommendation from the Pawtucket Medical Association

The following recommendation adopted at a meeting of the Pawtucket Medical Association held on November 16, 1960, was submitted to the House:

That the Rhode Island Medical Society recommend to the Rhode Island Medical Society Physicians Service in regard to revision of the letter sent to the patient in explanation of service bene-

continued on next page

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fits, that the following phrase be added at the end of the second paragraph—

"Or if you receive X-ray, maternity or hospital medical services."

Doctor Alexander Jaworski discussed the resolution.

Action: It was moved that the House of Delegates approve of the recommendation made by the Pawtucket Medical Association. The motion was seconded and passed.

Child-School Health Committee

Doctor John T. Barrett reported for the Child-School Health Committee.

He reviewed a communication from the Rhode Island Tuberculosis and Health Association regarding a tuberculin testing program for schools. After brief discussion it was voted that the matter be referred back to the Committee on Child-School Health for further study.

Report on Mass Immunization Programs

Doctor Barrett reviewed the problem of mass immunization, and he made the following recommendations:

1. In view of the fact that oral polio vaccine apparently will not be generally available in sufficient quantity before next fall for any large scale immunizing program, the House of Delegates of the Rhode Island Medical Society again urges that there be the widest possible utilization of the Salk vaccine in the coming months for the prevention of poliomyelitis.
2. In view of the fact that the Rhode Island State Department of Health has purchased jet-spray equipment for use in mass immunization programs in this state, the House of Delegates recommends that this technique be restricted to use for large groups at clinics for persons unable to pay for the inoculation by their family physician, and that the use at any other clinics be subject to approval by the respective district medical society in the area in which the clinic is to be held.
3. That the Rhode Island Medical Society urge its members, the press, radio and television media, and the public generally, to secure the protective immunization of Salk vaccine before June 1, 1961.

The recommendations were discussed by members of the House.

Action: It was moved that the House approve the report of the chairman of the Mass Immunization Committee and endorse the recommendation submitted. The motion was seconded and passed.

Committee on Medical Economics

Doctor Stanley D. Simon submitted the report of his committee, copy of which was distributed to each member of the House. The report was discussed by members.

Action: It was moved that the House concur with the Committee on Medical Economics that an investment program for physicians be developed on a local rather than a regional basis, and further it voted to authorize the committee to explore such an investment program with major banking companies in Rhode Island, to poll the Society membership to determine its interest in the type of local plan most feasible and that it report its complete findings to the House of Delegates in April. The motion was seconded and adopted.

Medical Defense and Grievance

Doctor Francis B. Sargent gave an oral report on the number and type of cases reviewed by his committee since 1954.

It was moved that the report as submitted by Doctor Sargent for the committee on medical defense and grievance be approved. The motion was seconded and adopted.

Physicians Service

Doctor Mara noted that the House had voted that a report on Physicians Service be given at each of the House meetings. He also noted that the minutes of the meeting of the Board of Directors of Physicians Service had been sent to each member of the House, and he asked if there was need to review or read these minutes.

Action: It was moved that the reports already submitted on Physicians Service should not be read at this meeting. The motion was seconded and passed.

Committee on Social Welfare

Doctor Peter Mathieu discussed the report of the Committee on Social Welfare, copy of which was included in the handbook submitted to the House of Delegates.

Action: It was moved that the report of the Committee on Social Welfare as submitted and the recommendations contained therein be approved. The motion was seconded and adopted.

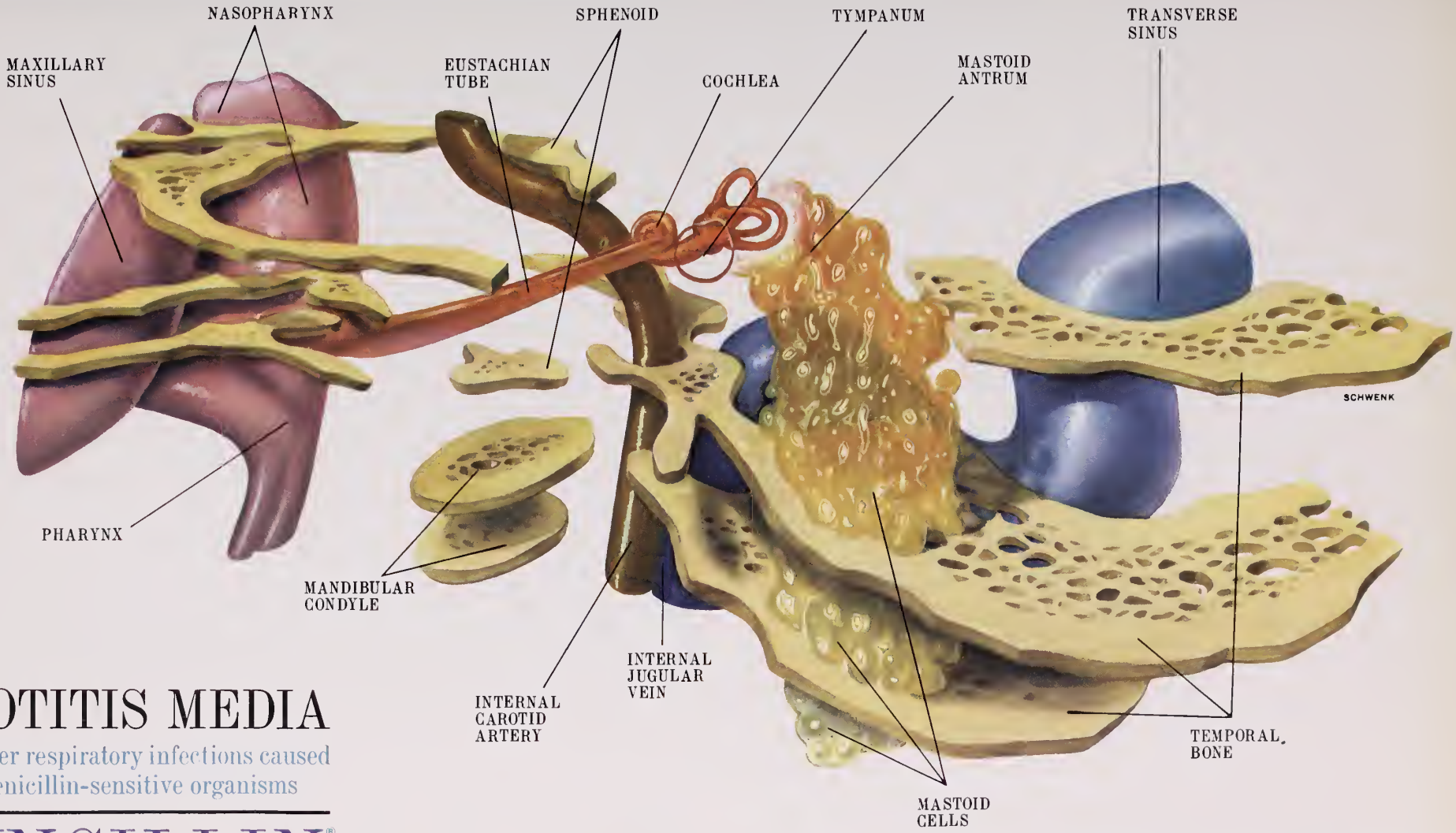
White House Conference on Aging

Doctor Mara noted that a detailed report on the White House Conference on Aging had been submitted in the handbook to the House of Delegates. He commended the executive secretary for this report, and he urged that all members read it.

Woman's Auxiliary

The president noted that the report submitted by

continued on page 169



This diagram represents the lateral aspect of the left middle ear and related structures. The bony landmarks are shown in serial sections.

IN OTITIS MEDIA

and upper respiratory infections caused by penicillin-sensitive organisms

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for your next case in which penicillin is indicated . . .

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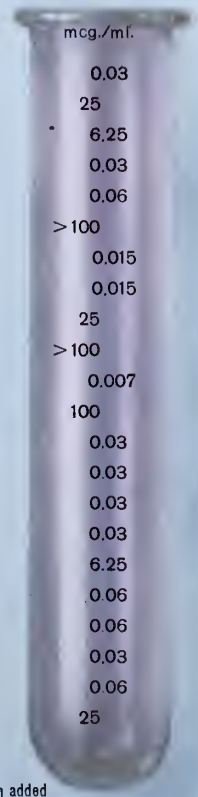
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Effective in vitro antibacterial activity against penicillin-sensitive organisms*

	mcg./ml.
Bacillus anthracis	0.03
Bacillus cereus	25
Bacillus circulans ATCC 9961	6.25
Corynebacterium xerosis	0.03
*Diplococcus pneumoniae	0.06
Escherichia coli ATCC 8739	>100
Gaffkya tetragena	0.015
Micrococcus flavus	0.015
Salmonella paratyphi A	25
Salmonella typhosa	>100
Sarcina lutea ATCC 10054	0.007
Shigella sonnei	100
Staphylococcus aureus 209P	0.03
Staphylococcus aureus var. Smith	0.03
Streptococcus agalactiae ATCC 1077	0.03
Streptococcus dysgalactiae ATCC 9926	0.03
Streptococcus faecalis PCI 1305	6.25
*Streptococcus pyogenes 203	0.06
*Streptococcus pyogenes Digonnet	0.06
Streptococcus pyogenes 2320	0.03
Streptococcus pyogenes 23586	0.06
Vibrio comma	25

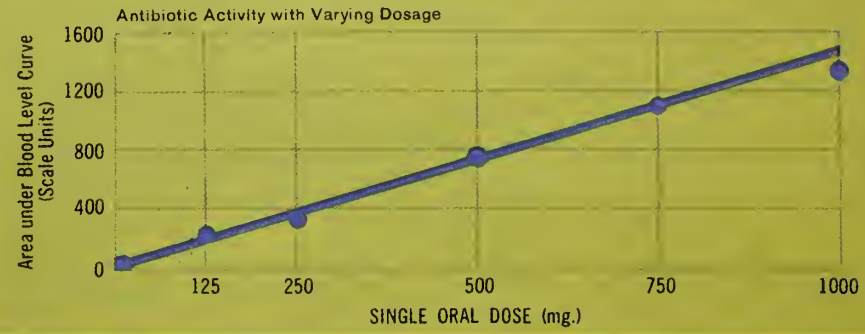


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Direct control of blood levels: serum concentration proportional to size of dose*



*As is true with all antibiotics, clinical response does not always correlate exactly with in vitro bacterial sensitivity reports or laboratory blood level findings. However, these are useful guides.

Dosage: 125 mg. or 250 mg. 3 times a day, depending on severity of the infection, and on age and weight of the patient. Larger dosage (e.g., 500 mg. t.i.d.) may be used for more severe infections. Although maximum absorption is obtained in the fasting patient, clinically adequate blood levels are almost always obtained when SYNCILLIN is administered with meals. Treatment should be continued until physician is confident infection has been overcome. ☐ Beta-hemolytic streptococcal infections should be treated for at least 10 days to help prevent the development of rheumatic fever. Even more prolonged therapy may be required for certain staphylococcal infections. ☐ Complete information on indications and precautions is included in the official circular accompanying each package.

the president of the Woman's Auxiliary had been included in the handbook distributed to the House of Delegates.

Action: It was moved that the Woman's Auxiliary report be received and placed on file. The motion was seconded and adopted.

Adjournment

The business of the House completed, the meeting was adjourned at 10:27 P.M.

Respectfully submitted,

JOHN E. FARRELL, SC.D.,
Executive Secretary

REPORT OF THE SECRETARY

The Council has held two meetings since the September session of the House of Delegates. Actions taken at these meetings included the following:

1. A proposal for providing drugs by the Rhode Island Heart Association under a proposed rheumatic fever secondary prophylactic program was not approved.
2. A proposal that free influenza inoculations be given by the Navy to civilian employees was disapproved on the grounds that no emergency existed for such a mass immunization, and civilian employees had ample time to secure inoculations by private physicians prior to the season of year when influenza might be prevalent.
3. An appropriation of $500 was granted the Cancer Committee of the Society for its statewide cancer conference for physicians to be held on Wednesday, April 5, 1961.
4. Committee appointments by the president were approved.
5. Accumulated interest in the Society's savings bank fund for the group Blue Cross-Physicians Service was transferred to the Benevolence Fund of the Society.
6. Approval was given for publishing the special report on medical care of persons over the age 65, as submitted by the Committee on Social Welfare and Aging of the Society to the Governor, in the RHODE ISLAND MEDICAL JOURNAL.
7. The advisability of participation by the Rhode Island Medical Society in a New England Postgraduate Assembly to be held in Boston in November, 1961, under the sponsorship of the Council of the New England State Medical Societies, was referred to the House of Delegates of the Society for its consideration.
8. The president was authorized to appoint a committee from the Council to meet with representatives of the proposed medical assistants group to explore the advisability of a state chapter of such an organization, and to report back to the Council its findings.
9. A favorable opinion was given to the American Medical Association relative to the establishment of a National Medical Political Action Committee.
10. The president was authorized to appoint a committee on the treatment and prevention of athletic injuries, and to request that such committee be urged to consider the feasibility of a sports injury clinic for the athletic staffs of the secondary schools in Rhode Island.
11. Approval was given for the Society to be listed as a co-sponsor for the scientific session on cardiovascular disease to be conducted under the auspices of the Rhode Island Heart Association on March 29, 1961.
12. Support was given the proposal to rename the Rhode Island Curative Center the Doctor John E. Donley Rehabilitation Center.
13. Doctor Earl F. Kelly was named as official delegate of the Society to the Congress on Medical Licensure and Education.
14. The secretary was authorized to send to every member of the Society a copy of the proposed physicians lien law to be introduced in the General Assembly, and to urge membership support of the bill.
15. The annual report of the treasurer for the year 1960 was reviewed and approved.
16. Approval was given that the Society be a co-sponsor with the State Departments of Health and Welfare, and the Chronic Illness Committee of the Rhode Island Council on Community Service a conference on the prevention of disability to be held in April.
17. In Executive Session the Council reviewed a report from the Committee on Medical Defense and Grievance, and voted to suspend a member of the Society for unethical conduct.

Respectfully submitted,

ARTHUR E. HARDY, M.D., *Secretary*

ANNUAL REPORT OF THE TREASURER

A complete financial statement of the Society's general operating account, including the medical journal publication, as well as the investment portfolio established with the Trust Department of the Industrial National Bank in Providence has been reviewed and approved by the Council. All receipts were traced into the bank and canceled checks were examined and checked to disbursement records. Totals of duplicate deposit slips were verified and checked to ledger accounts recording the various classification of receipts. All ledger account additions were verified.

The general fund for operation of the Society's activities amounted to $7,424.23 at the start of 1960. Total receipts from all sources, except the medical journal, amounted to $66,623.84. Expenses, exclusive of those for the medical journal, amounted to $66,501.59. Major building repairs costing over $5,000 reduced the contingency fund, and as a result we ended 1960 with a cash reserve in the general operating fund of $7,546.48, only $122.25 net gain for the year.

The medical journal started the year with a cash balance of $7,927.66. Receipts, including accounts receivable, amounted to $26,258.31. Expenses amounted to $25,299.26 leaving a cash balance, including anticipated receipts from accounts out-

continued on next page

standing, of $8,886.71. There is indication that our advertising revenue will be reduced in 1961, and therefore this reserve should be held as a cushion against any loss in the coming year in the operation of the publication.

The investment portfolio was increased during the year by the investment of $1,753.38 which represented the dividend accruing to the general operating fund from previous investments. The total dividend return for all the Society's pooled funds amounted to $3,062.03. The market value of the investment portfolio of the Society, plus cash in the Suspense Account for investment, at the end of 1961 was $86,068.

A summary of the Society's 1960 financial condition is as follows:

Cash Balance, Checking Account, Industrial Nat'l Bank, Jan. 1, 1960	$ 15,351.89
Receipts, 1960	92,882.15
Total	$108,234.04
Investments, 1960	1,753.38
Balance, General Account	$106,480.66
Expenses, 1960	90,047.47
Cash Balances, Checking Accounts, Industrial Nat'l Bank, Jan. 1, 1961	$ 16,433.19
Total Cash and Invested Assets, January 1, 1961:	
Cash Balances, Checking Accounts, Industrial Nat'l Bank	$ 16,433.19
Investments, Pooled Fund, Trust Dept. Industrial Nat'l Bank, and Uninvested Principal Cash	86,068.00
Total	$102,501.19

J. Murray Beardsley, M.D., *Treasurer*

MEDICAL ECONOMICS

The Committee on Medical Economics requests that the House of Delegates instruct it regarding the following matter:

During the past year a committee of the Council of the New England State Medical Societies has studied proposals for an investment program for physicians in the region. In April the Council will propose that a N. E. Physicians Investment Company be incorporated by interested physicians. The Company would start without capital, but it would seek to get enough doctors to purchase stocks in the amount of $100,000 to meet incorporating legal requirements. Standard and Poor would be the investment advisers; the Shawmut National Bank of Boston the depository. No loading charge would prevail, and income of the fund up to $4,000 would be used to pay legal counsel, literature, etc. Standard and Poor would get 2/10% of the first $300,000 invested, and 1/10% when the million-dollar mark is passed.

Subscribers would have to be members of their State Medical Society. Minimum investment would be $25 monthly.

The Committee on Medical Economics has for some time considered the question of an investment program, and it believes that if it is feasible it should be operated at the local level. An interesting plan under which a separate Common Trust Fund could be created locally under which each participating physician could execute a relatively short, to-the-point trust instrument, has been submitted by one Providence bank.

Your Committee, therefore, asks a ruling from the House on the following:

1. Does the House concur with the Committee that if an investment program for physicians is feasible it should be locally operated and administered, rather than on a regional basis?
2. If the House concurs with the Committee on point No. 1, does it authorize the Committee,
   1. to explore the proposal with the major banking companies in Rhode Island,
   2. poll the Society membership to determine its interest in the type of local plan most feasible, and
   3. report its complete findings to the House of Delegates at its meeting in April?

Respectfully submitted,
Stanley D. Simon, M.D., *Chairman*

SOCIAL WELFARE

The Committee on Social Welfare has held several meetings with staff members of the division of public assistance of the state welfare department during recent months, with special consideration being given to the discussion of the cost of drugs for welfare recipients.

In July, 1960, representatives of the Committee and of the state welfare department met with similar representatives from eleven states along the Eastern seaboard for a conference organized by the Committee on Indigent Care of the Council on Medical Service of the American Medical Association. The contributions from Rhode Island are reflected in good measure in the A.M.A. committee report adopted by the House of Delegates of the American Medical Association at its meeting in Washington, D.C. in November.

Recently the Society's committee met jointly with state welfare officials, representatives of the R. I. Pharmaceutical Association and the Apothecary Society of Rhode Island to consider what could be done to encourage, where advisable and feasible, the use of certain expensive drugs by their

continued on page 172

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Under normal circumstances, the *Convertible* Living Trust functions primarily as your investment "bookkeeper," handling the time-consuming chore of detailed record keeping and other paperwork for you. You continue to exercise full control of your own investments.

However, if at any time you become temporarily or permanently unable to actively manage your investments, the automatic "convertibility" of this Trust permits Industrial National's skilled trust officers to assume management of your estate immediately — for as long a period as your circumstances require.

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HOUSE OF DELEGATES

continued from page 170

generic name to effect a financial savings to the state.

Your Committee cannot condone any proposal that would in any manner restrict physicians in their treatment of welfare patients, or which would have them provide treatment different than that followed in the care of other private patients.

We have noted the suggestion in the report adopted by the House of Delegates of the American Medical Association at its Clinical meeting in November, 1960, that one way of economy in welfare patients prescriptions might be emphasis on use of "counterpart drugs of equal therapeutic effectiveness when available, when the quality of the product is assured, and when a price differential exists."

However, in our study of the entire problem we find little or no authority at either state or national level to aid the physician in his determination of the reliability of some companies distributing pharmaceuticals at a lesser cost than companies that have earned public and professional confidence by their integrity in the preparation of the medications for which they have expended sizable funds in preliminary research.

We record our concern that the emphasis is being placed too heavily on the physician to prescribe less costly drugs, the therapeutic effectiveness of which he may question, when his professional responsibility demands that he provide the highest standards of care and medication to every patient alike. It appears to your Committee that the basic problem of prescription charges is one that must be resolved first by the pharmacist and the pharmaceutical industry.

As taxpayers, physicians recognize their civic responsibilities to protect and conserve public tax funds. To that end we are of the opinion that every physician should be better informed of the costs of most commonly used drugs, and if a drug is prepared by a reliable pharmacy, and its therapeutic effectiveness, in the opinion of the physician, is satisfactory, and it can be secured at a lesser cost than a similar drug, then every consideration should be given to its use for welfare patients.

Your Committee recommends that the Society conduct, in co-operation with the State Department of Social Welfare, a conference, or a series of conferences if necessary, for these physicians handling over the average public assistance case load for medical care, to inform them of the problem of drug expenditures for welfare patients in Rhode Island, and to seek reasonable ways in which the program may be continued on both a medically and economically adequate basis.

Your Committee appends to this report a copy of the report of the Council on Medical Service of the American Medical Association, adopted by the House of Delegates of that Association in Washington, D.C., in November 1960, relating to *Guides for Drug Expenditures for Welfare Patients.* It recommends that these guides be published in the Rhode Island Medical Journal, and possibly otherwise distributed to the membership of the Society for their information and assistance in the over-all problem.

Respectfully submitted,

Committee on Social Welfare
Rhode Island Medical Society

ARMY PAPER QUOTES 'EFFICIENCY' HUMOR

Fort Meade, Md. (AP) — "Never makes the same mistake twice, but it seems to me he has made them all once."

It was an officer at Fort Meade describing one of his subordinates in an "efficiency report."

The post newspaper, *Sound Off*, quoted it and other gems recently to show that humor can creep into the most forbidding documents.

"His leadership is outstanding," said another report, "except for his lack of ability to get along with subordinates."

Other officers were rated by their superiors like this:

"A quiet, reticent officer. Industrious, tenacious, careful and neat. I do not wish to have this officer as a member of my command at any time."

"In any change in policy or procedure, he can be relied upon to produce the improbable, hypothetical situation in which the new policy cannot work."

"Needs careful watching since he borders on the brilliant."

"Keenly analytical and his highly developed mentality could best be utilized in the research and development field. He lacks common sense."

"Open to suggestions but never follows same."

... *Reprinted from* The New York Times, Aug. 28, 1960

WOMAN'S AUXILIARY

The Woman's Auxiliary to the Rhode Island Medical Society, due to an early June start, has completed two important phases of work at the turn of the year. These are in addition to its usual endeavors and customary functions such as regular meetings, membership drive, annual dinner, dance for scholarships, diabetic fair and general co-operation with the Rhode Island Medical Society.

As a result of specific request from the Eastern Regional Traffic Safety Conference held in New York City last year, the representatives from women's and parents' organizations from Rhode Island agreed to co-operate and conduct a similar Traffic Seminar on the state level. At the first organizational meeting on June 2, 1960 our state auxiliary was represented by the state president and her state

safety chairman, Mrs. Alexander Jaworski. Mrs. Jaworski was secretary to this group and attended the three following planning meetings held in conjunction with the State Highway Traffic Division. On September 26, 1960 an all-day Traffic Safety Seminar was held at the Sheraton-Biltmore Hotel in Providence, Rhode Island. Mrs. Joseph Chatigny, Eastern Regional Safety chairman, attended as guest of our state president. The Woman's Auxiliary to the Rhode Island Medical Society is very proud to have had a leading part in organizing and fulfilling the purpose of alerting the public to highway safety problems both nationally and locally.

In November, 1960, the Auxiliary, under the very fine leadership of Mrs. H. Frederick Stephens who with much dedication took time out from her already busy year as Eastern Region Civil Defense chairman, to sponsor a series of television programs. Acting as Publication Relations officer, a combination of Community Service and Publicity, she coordinated this Public Service Feature to answer a peculiar and specific need in this area.

Seven physicians from the State Medical Society went on the air with their corresponding Auxiliary chairmen to:

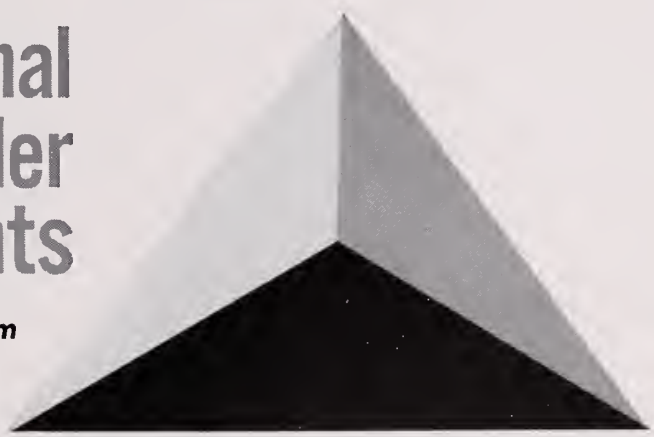
1. Better acquaint the public of the medical needs in this area.
2. Stimulate interest, and enlist the assistance of volunteers.
3. To make known what actually *is* being done by the Medical Society and Auxiliary for the community.

These six programs which covered the following fields—Community Health, Problems of the Aging, Health Career Scholarships, Mental Health, Safety and Civil Defense—evoked a tremendous response. Pamphlets and information offered to the public were sent for. The Civil Defense show was repeated at a later date, as was the Mental Health program, by popular request. The television channel quoted this an "outstanding program." It is felt a very definite public service was performed and that the Medical Society gained in good public relations as a result of this joint endeavor. Thus the Woman's Auxiliary to the Rhode Island Medical Society has contributed to the National appeal to "preserve and enhance the heritage of American medicine."

Respectfully submitted,
MRS. RICHARD RICE, *President*

WEDNESDAY, APRIL 5, 1961
Cancer Conference
For Rhode Island Physicians Under the Auspices of the Cancer Committee, Rhode Island Medical Society

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▲ *failing nutrition*

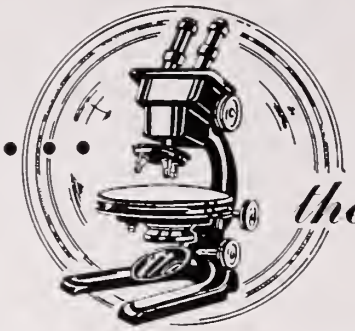
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THROUGH . . .  *the Microscope*

President Kennedy's Medical History Reviewed

In the February issue of TODAY'S HEALTH magazine, published by the American Medical Association, President John F. Kennedy's medical history is reviewed, and assurance is noted that he currently enters his new work with excellent health and his medical future bright.

Kennedy's medical problems began at an early age. At thirteen he suffered an acute appendicitis attack which "blighted his athletic efforts at Canterbury School in Milford, Connecticut," the magazine said.

A jaundice attack delayed his start at Princeton and a recurrence during the winter compelled him to drop out.

In his sophomore year at Harvard, he suffered a back injury — an apparent ruptured disc in the lower lumbar area — which plagued him for years and nearly cost him his life just six years ago.

His later health difficulties are traced to the agonizing hours and days following the sinking of his PT boat by a Japanese destroyer in the Solomons during the war. The tremendous exertion he expended in swimming long hours to reach help took its toll.

Weakened by exhaustion, Kennedy contracted malaria which lingered for about seven years before he was cured.

The exhaustion plus the malaria (his weight dropped to 127 pounds) may have caused the adrenal insufficiency diagnosed later.

When last tested, it was found that Kennedy's adrenal function was normal. However, he has continued to take corticosteroids by mouth to insure optimum adrenal coverage.

Kennedy also was thrown violently against the deck of the PT boat when it was hit by the destroyer and suffered a severe recurrence of the old football injury to his back.

This time it was associated with sciatica—a usual consequence of a ruptured intervertebral disc when some of the gelatinous nucleus escapes and presses on the nerve roots forming the sciatic nerve to the lower extremity. The pressure throws the muscles into spasm all along the line.

In 1944, he underwent a lumbar disc operation. The pressure on the nerve fibers supplying the muscles was relieved by removing the gelatinous material from the nerve roots where they emerge from the spine.

However, the muscle spasm failed to subside after the operation and it was discovered that the condition was being aggravated because one of Kennedy's legs was a trifle longer than the other. In walking, the inequality in leg length causes an abnormal seesaw movement in the back which puts a continual strain on the spinal muscles.

By the summer of 1954, Kennedy was obliged to use crutches because of the severity of the pain.

Although in a weakened condition, Kennedy decided to gamble on another operation. On October 21, 1954, a lumbar spine fusion was attempted by inserting a small metal plate. The operation didn't take. Then he contracted an infection. Physicians feared death was near and Kennedy was given the last rites of his church.

However, he rallied and attempted to regain his health in Florida. There was little improvement and in February 1955 the metal plate was removed and the infection healed with antibiotics. He continued to suffer pain and use crutches.

Final relief was obtained by novocain injections directly into the cramped muscles. Novocain is used on muscles in spasm to interrupt the vicious cycle of pain-spasm-pain.

Spasm shuts down blood flow to the muscles; ending it restores their circulation. Thus, muscles can recover completely and function normally.

Other corrective measures were taken. To eliminate the seesaw back movement, Kennedy wears a quarter-inch lift in the heel of his left shoe. To support the lower part of his back, he wears a small, corset-type brace.

The medical verdict is that Kennedy's back now is "entirely well."

As evidence of this, the president-elect swims regularly, plays tennis and golf, and bounces his

three-year-old daughter around on his shoulders without any thought about his back.

How Hungry Can You Get?

A December issue of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION reported the story that a total of 258 objects were recovered from the stomach of a fifty-six-year-old man at the Brooklyn, New York, State Hospital.

The identifiable objects and "an amorphous mass of eroded metal sludge" weighing a total of three pounds, 1¼ ounce were removed by surgery.

Among the 258 items were 26 keys, 3 sets of rosary beads, 16 religious medals, 1 bracelet, 1 necklace, 3 metal chains, 1 beer-can opener, 1 knife blade, 39 nail files, 4 nail clippers, 3 pairs of tweezers, and 88 assorted coins.

Despite the fact that a large amount of iron was oxidizing in his stomach, the patient was suffering a moderate anemia, the article said.

The presence of the objects was discovered during a physical examination of the man, a mental patient at the state hospital since 1936, after his ankles became swollen.

Boston Has Highest Ratio of Physicians to Population

Among the greater metropolitan areas with populations of a million or over, the Boston area has the highest ratio of physicians to population, according to a report issued in December by the Public Health Service.

In the four counties that comprise the Boston-Lowell-Lawrence metropolitan area, where the ratio is highest, there were 207 active non-Federal physicians per 100,000 people in mid-1959. The San Francisco-Oakland area (made up of six counties) ranked second with a physician-population ratio of 199. The consolidated New York-Northeastern New Jersey area (which links eight New York counties with eight counties in New Jersey) was third with 189 physicians for every 100,000 persons.

The physician-population ratios in the remaining seventeen greater metropolitan areas with populations in excess of a million are as follows: Washington, D.C.-Md.-Va. (173); Baltimore, Md. (166); Seattle, Wash. (162); Cleveland, Ohio (161); Philadelphia, Pa.-N.J. (160); Cincinnati, Ohio-Ky. (154); Minneapolis-St. Paul, Minn. (153); Los Angeles-Long Beach, Calif. (151); Chicago, Ill.-N.W. Indiana (143); Buffalo, N.Y. (137); Dallas, Tex. (137); Kansas City, Mo.-Kans. (133); Houston, Tex. (132); St. Louis, Mo.-Ill. (132); Milwaukee, Wis. (128); Pittsburgh, Pa. (117); and Detroit, Mich. (111).

In the 157 standard metropolitan statistical areas with fewer than a million people, the ratio of physicians to population ranged from 459 to 39. Individual areas with high ratios were: Ann Arbor, Mich. (459); Durham, N.C. (392); Galveston, Tex. (284); Madison, Wis. (257); Topeka, Kans. (215); Syracuse, N.Y. (212); and Rochester, N.Y. (200).

Blue Shield Plans Enroll Additional 1,847,000

More than 1,847,000 persons enrolled in the 74 Blue Shield Plans located in North America during the first nine months of 1960, and during the same period the Plans paid out approximately $550,000,000 for care rendered to members, the National Association of Blue Shield Plans announced here today.

"Of special significance is the fact that the $550,000,000 paid to physicians was an all-time high in payments for a nine-month period, and represented approximately 91 per cent of the total income of all Blue Shield Plans," the national association indicated in its report. At the same time, the 74 Blue Shield Plans were reported to have expended less than 10 per cent of total income for administrative expenses.

The national association also said in its report that membership in the 74 Plans reached 46,640,348

continued on next page

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DID YOU KNOW?

- That in 1959, Americans suffered 43 million accidents severe enough to restrict activity or require medical attention.
- That nearly 19 million of these accidents occurred at home, more than eight million occurred at work, about four million were motor vehicle mishaps, and various other causes accounted for 12 million accidents.
- That accidents hit a peak in the summer months of July, August and September, and reached a low in the cold months of January, February, and March.
- That in 1959, for every 1,000 persons in the population, there were 249 accidents severe enough to restrict activity or require medical care.

as of September 30, 1960—an enrollment of one out of every four Americans. Included in the enrollment figures for the first time are approximately 938,000 Federal workers who selected Blue Shield under the recently enacted Federal Employees Health Benefits Program.

Hearing Problems Reviewed

The belief that loss of hearing is primarily an old folks' complaint may be popular, but it's mistaken according to the December issue of *Patterns of Disease,* a Parke, Davis & Company publication for the medical profession. In fact, the publication points out, almost three out of every five persons with impaired hearing are under sixty-five. And although the incidence of hearing disorders does increase sharply with age, not all elderly persons are hard of hearing.

As many as one third of elderly persons examined in one study had perfectly normal hearing and only a small number—7% showed severe hearing loss. Even when deafness does develop in the elderly person, its causes cannot always be attributed to arteriosclerotic and other degenerative changes of the aging process. One study of older persons cited by *Patterns* showed that in about 50% of the cases over fifty years of age, the causes of hearing loss were similar to those diagnosed in younger persons.

Recent scientific and technological advances may be raising our living standards but they're also inflicting serious damage on our ears.

A report on the effects of noise on hearing is included in the December issue. "Noise-induced hearing loss," the report says, "although not a new problem, is becoming more important because of expansion of industry and development of high-speed machines."

The incidence of hearing loss due to noise depends on such factors as the level of sound, frequency of the noise in cycles per second, the duration of the noise and the susceptibility of the individual. Brief exposure to the noise of a jet engine for instance—a noise level of 130-140 decibels—may have no significant effect. But prolonged exposure to levels of 100 decibels—the equivalent of the noise level of a subway—may cause damage. And if the noise is both prolonged and intense, *Patterns* says it will produce "permanent damage to the inner ear, varying from minor changes in the endings of hair cells to complete destruction of the organ of Corti."

Collegians to Debate Compulsory Health Insurance

The three most often repeated words on college campuses throughout the country this year will be: *Compulsory Health Insurance.*

More than 5,000 college and university students, taking part in the 1960-61 National Intercollegiate Debate program, are currently discussing the proposition: That the United States should adopt a program of compulsory health insurance for all citizens.

The discussion question was chosen through an annual poll of debating coaches throughout the country by the Committee on Intercollegiate Discussion and Debate of the Speech Association of America. Each student engaged in the intercollegiate debate must learn both sides of the question.

Colleges and universities are now holding intraschool elimination contests. From there, invitational debates will be held among schools on a regional basis.

A highlight of the year's debating activity will take place next spring at the United States Military Academy, West Point, New York, at which meeting regional forensic champions from leading universities will compete in the national spotlight.

Because the evolution of health insurance has so important a bearing on the intercollegiate debating topic, the Health Insurance Institute developed an insurance reference kit specifically for this purpose. Nearly 4,000 of these kits were sent to colleges and universities before the opening of the school year for use by debaters, speech departments, and libraries. The Institute has become the central source of insurance information on the debating topic and has made its services available to students for further research.

X-ray Work Covered Out of Hospital

There is a growing trend in the health insurance business toward providing coverage for out-of-hospital diagnostic X ray and laboratory work, the Health Insurance Institute reported recently.

As of the end of 1959, at least 32 million persons were protected by insurance companies against the cost of out-of-hospital diagnostic work as a result of growing public acceptance of policies developed by the insurance industry, said the HII.

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Seventy-eight insurance companies in the group field reported at the end of 1959 that they had covered some ten million persons with special riders on hospital policies providing benefits for diagnostic X ray and laboratory work done outside the hospital. The HII said there were more than 400 insurance companies in the group field.

In addition, the twenty-two million persons with major medical expense insurance at the end of 1959 all were covered for out-of-hospital diagnostic work, said the Institute.

There has been a rapid growth in both regular medical and major medical insurance, the HII said. In 1950, insurance companies covered eight million persons with regular medical insurance and about 100,000 with major medical insurance. The insurance company coverage figures today are estimated to be forty million persons with regular medical insurance and twenty-five million persons with major medical insurance.

Food and Drug Issues New Labeling Regulations

The Food and Drug Administration has amended its new regulations requiring changes in labeling used to promote the sale of prescription drugs to physicians. At the same time the Agency extended to February 7, 1961, the effective date of those parts of the regulations previously scheduled to become effective on January 8, 1961. These regulations were published in the Federal Register on December 9, 1960.

Time extensions also have been granted for compliance with certain parts of the regulations scheduled to have become effective on March 9, 1961.

As amended, the regulations will extend the March 9, 1961, date and make these other changes:

1. Permit the use until January 1, 1962, of labels already printed even though they do not contain all the information required in the order published in the Federal Register on December 9, 1960, if the information is elsewhere on the package or in a brochure enclosed in that package.

2. Permit until June 6, 1961, the marketing of drugs already packaged without code or control number on the carton if this number is on the label.

3. Provide for continued use until January 1, 1962, of catalogs and price lists which have some information (but not full disclosure) if sent only to pharmacists and wholesale druggists, and not to medical practitioners.

Where declaration of inactive ingredients is required, flavorings, perfumes and colors may be listed as such, without naming each specifically. Trace amounts of harmless substances used only for individual product identification need no declarations on labels.

In the case of parenterals, water for injection as a vehicle need not be declared under the clarifying regulations. A substance added to make the solution isotonic or to adjust the acidity or alkalinity need only be listed by name and effect, without stating the percentage.

The regulations also were amended to make it clear that no package insert is required solely because the label bears the dosage information called for in another section. Mr. John L. Harvey, deputy commissioner of Food and Drugs, said that the basic question as to required package inserts is being considered in the light of all comments submitted in response to an earlier proposal published in the Federal Register July 22, 1960. Time for submitted comments expired December 22, 1960.

Hospital Use in U.S. Dips to 1940 Level

The annual use of hospital care by the nation's population has declined to the 1940 level of 2.8 days a person, the Health Insurance Institute reported recently.

The average number of days each American spent in general and special hospitals, mental hospitals, and special tuberculosis hospitals was the same in 1959 as in 1940, down after a peak of 3.9 days a person in the wartime year of 1945, and an average of 3.1 days a person in 1951, 1952, and 1953, the Institute stated.

The days in hospital per person for the total population was the same for 1940 and 1959 even though hospital admission rates were 75 per cent higher than 20 years ago, the HII said in its report comparing admission rates, lengths of stay, and population figures.

In 1940 there were 74 admissions to general and special hospitals for each 1,000 persons in the population compared to 130 admissions in 1959, said the Institute.

However, advances in medical science helped reduce the lengths of stay in these hospitals, from an average of 13.7 days in 1940 to 9.6 days in 1959. This decrease was the leading reason why the number of days in all hospitals for each 1,000 persons in the population declined from 2,839 days in 1940 to 2,811 days in 1959.

MANUSCRIPTS

Manuscripts for publication and correspondence relating to them should be sent to the *Editor*, RHODE ISLAND MEDICAL JOURNAL, 106 Francis St., Providence 3, R. I. Manuscripts should be typewritten on one side of the paper only, with double spacing, and liberal margins. References should be placed at the end of the article and should conform to the style of the Quarterly Cumulative Index Medicus, giving author, title, journal, volume, page, month and yeaer; e.g., Doe, J., Calcium therapy, Rhode Island M.J. 61:22, June 1953. References to books, monographs and pamphlets should indicate the author, the title, the name and city of the publisher, the year of publication, edition and the page number of the reference.

ON THE MEDICAL LIBRARY BOOKSHELVES

Eleven new titles have been added to the Davenport Collection and are available for circulation:

THE MAN NEXT TO ME. An Adventure in African Medical Practice by Anthony Barker. Harper & Brothers, N.Y., 1959.

A DOCTOR IN MANY LANDS. The Autobiography of Aldo Castellani. Doubleday & Co., Inc., Garden City, 1960.

13 FAMOUS PATIENTS by Noah D. Fabricant. Chilton Company, Book Division, Phil., 1960.

THROUGH STREETS BROAD AND NARROW by Gabriel Fielding. William Morrow & Co., N.Y., 1960.

MASSACHUSETTS. There She Is — Behold Her by Henry F. Howe. Harper & Brothers, N.Y., 1960.

WOMAN DOCTOR OF THE WEST. Bethenia Owens-Adair by Helen Markley Miller. Julian Messner, Inc., N.Y., 1960.

THE TORCH by Wilder Penfield. Little, Brown & Co., Inc., Bost., 1960.

MEDICINE AND SOCIETY IN AMERICA, 1660-1860, by Richard H. Shryock. New York University Press, N.Y., 1960.

MOSTLY MURDER. The Autobiography of Sir Sidney Smith. David McKay Co., Inc., N.Y., 1959.

THE ANTIBIOTIC SAGA by Henry Welch and Felix Marti-Ibanez. Medical Encyclopedia, N.Y., 1960.

DR. IDA. The Story of Dr. Ida Scudder of Vellore by Dorothy C. Wilson. McGraw-Hill Book Co., Inc., N.Y., 1959.

Other purchases were:

CARDIAC SURGERY 1960-1961. Edited by Charles P. Bailey. F. A. Davis Co., Phil., 1960.

THE PHYSIOLOGICAL BASIS OF MEDICAL PRACTICE. A Text in Applied Physiology by Charles H. Best & Norman B. Taylor. 7th ed. Williams & Wilkins Co., Balt., 1961.

YEAR BOOK OF GENERAL SURGERY (1960-1961 Series). Edited by Michael E. DeBakey. With a Section on Anesthesia edited by Stuart C. Cullen. Year Book Publishers, Inc., Chic., 1960.

THE MEANING OF DEATH. Edited by Herman Feifel. Blakiston Div., McGraw-Hill Book Co., Inc., N.Y., 1959.

INBORN ERRORS OF METABOLISM by David Yi-Yung Hsia. Year Book Publishers, Inc., Chic., 1959.

SO YOU WANT TO BE A DOCTOR by Alan E. Nourse. Harper & Brothers, N.Y., 1957.

MEDICAL PHYSIOLOGY AND BIOPHYSICS. Edited by Theodore C. Ruch & John F. Fulton. 18th ed. W. B. Saunders Co., Phil., 1960.

ON THE INHALATION OF THE VAPOUR OF ETHER IN SURGICAL OPERATIONS: . . . by John Snow, Lond., 1847. Reproduced, Under the Auspices of the Wood Library-Museum of Anesthesiology, New York. Lea & Febiger, Phil., 1959.

PROGRESS IN NEUROLOGY AND PSYCHIATRY. Edited by E. A. Spiegel. Vol. 15. Grune & Stratton, N.Y., 1960.

Review volumes from the Rhode Island Medical Journal were:

SYNOPSIS OF PATHOLOGY by W. A. D. Anderson. 5th ed. C. V. Mosby Co., St. L., 1960.

COMPLICATIONS IN SURGERY AND THEIR MANAGEMENT. Edited by Curtis P. Artz & James D. Hardy. W. B. Saunders Co., Phil., 1960.

CLINICAL MANAGEMENT OF BEHAVIOUR DISORDERS IN CHILDREN by Harry Bakwin & Ruth M. Bakwin. 2nd ed. W. B. Saunders Co., Phil., 1960.

CHILDBEARING BEFORE AND AFTER THIRTY-FIVE. Biologic and Social Implications by Adrien Bleyer, Richard L. Jenkins & Douglas P. Murphy. Vantage Press, N.Y., 1958.

LOVE, SKILL AND MYSTERY. A Handbook to Marriage by Theodor Bovet. Doubleday & Co., Inc., Garden City, 1958.

CIBA FOUNDATION COLLOQUIA ON ENDOCRINOLOGY. v. 13. Human Pituitary Hormones. Editors: G. E. W. Wolstenholme & Cecilia M. O'Connor. Little, Brown & Co., Bost. (1960).

SYNOPSIS OF GYNECOLOGY by Robert J. Crossen, Daniel W. Beacham & Woodard D. Beacham. 5th ed. C. V. Mosby Co., St. L., 1959.

FUNDAMENTALS OF CHEST ROENTGENOLOGY by Benjamin Felson. W. B. Saunders Co., Phil., 1960.

concluded on page 180

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References: 1. David, N. A.; Porter, G. A., and Gray, R. H.: Monographs on Therapy 5:60 (Feb.) 1960. 2. Ford, R. V.: Current Therap. Res. 2:92 (Mar.) 1960.

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THE MODERN FAMILY HEALTH GUIDE. Edited by Morris Fishbein. Doubleday & Co., Inc., Garden City, 1959.

MATERNITY. A Guide to Prospective Motherhood by Frederick W. Goodrich, Jr. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1959.

MEDICAL AND RENAISSANCE MEDICINE by Benjamin L. Gordon. Philosophical Library, Inc., N.Y., 1959.

WOMEN AND FATIGUE. A Woman Doctor's Answer by Marion Hilliard. Doubleday & Co., Inc., Garden City, 1960.

THE RELUCTANT SURGEON. A Biography of John Hunter by John Kobler. Doubleday & Co., Inc., Garden City, 1960.

CURRENT SURGICAL MANAGEMENT II. A Book of Alternative Viewpoints on Controversial Surgical Problems. Editors: John H. Mulholland, Edwin H. Ellison & Stanley R. Friesen. W. B. Saunders Co., Phil., 1960.

ADVENTURE TO MOTHERHOOD. The Picture-Story of Pregnancy and Childbirth by J. Allan Offen. Audio-Visual Education Co. of America, Inc., Miami. Distributed by Taplinger Publishing Co., N.Y., 1960.

WHAT PRICE MEDICAL CARE? A Preventive Prescription for Private Medicine by Sir Earle Page. J. B. Lippincott Co., Phil., 1960.

DISEASES OF THE NAILS by V. Pardo-Castello & Osvaldo A. Pardo. 3rd ed. Charles C Thomas, Springfield, Ill., 1960.

FROM STERILITY TO FERTILITY. A Guide to the Causes and Cure of Childlessness by Elliot E. Philipp. Philosophical Library, Inc., N.Y., 1957.

PROGRESS IN THE TREATMENT OF FRACTURES AND DISLOCATIONS, 1950-1960, by Thomas B. Quigley & Henry Banks. W. B. Saunders Co., Phil., 1960.

THE POWER OF SEXUAL SURRENDER by Marie N. Robinson. Doubleday & Co., Inc., Garden City, 1959.

HELP-BRINGERS: Versatile Physicians of New Jersey by Fred B. Rogers. Vantage Press, N.Y., 1960.

RESPIRATION. Physiologic Principles and Their Clinical Applications by P. H. Rossier, A. A. Bühlmann & K. Wiesinger. Edited and Translated by Peter C. Luchsinger & Kenneth M. Moser. C. V. Mosby Co., St. L., 1960.

THE PLASMA PROTEINS. Clinical Significance by Paul G. Weil. J. B. Lippincott Co., Phil., 1959., repr. Amer. Pract. & Digest Treat. Sept. 1958.

PATRONIZE JOURNAL ADVERTISERS

For the Medical Profession Only . . .

A Memorandum of the Services Available to Children at

THE MEETING STREET SCHOOL, CHILDREN'S REHABILITATION CENTER

As a Children's Rehabilitation Center we offer:

Comprehensive and integrated out-patient programs of habilitation or rehabilitation, on medical referral only, to infants

pre-school age children
school age up to sixteen

Examples

Neurologic disorders
Cerebral dysfunction
Cerebral palsy
Perceptual-conceptual disorders
Epilepsy
Hyperkinetic behavior
Orthopedic problems
Accident sequelae
  amputations
  burns
Sensory disorders
Metabolic disorders
Spinal cord injuries
Congenital anomalies
Spina bifida
Post-poliomyelitis
Post-encephalitis
Post-meningitis
Arthritis
Muscular dystrophy
Myotonia
Endocrine disorders
Speech problems
Hearing losses, etc., etc.

Meeting Street School, Children's Rehabilitation Center offers to the physician

I. *Diagnostic and evaluation service*
  (a) pediatric-neurological examination
  (b) other medical specialties as required
  (c) physical therapy evaluation
  (d) occupational therapy evaluation
  (e) speech and hearing evaluations
  (f) psychological testing
  (g) medical-social evaluation
  (h) educational evaluation
  (i) staff conference
  (j) complete written report mailed to the referring physician

II. *Treatment:* (Only following the above diagnostic service and only with the approval of the referring physician; treatment is all of the "therapy" type; medication and medical care is the physician's responsibility.)

Parents in all categories have the opportunity for counseling, if they wish. This is a helpful part of treatment.

For infants (up to age 3): Home Development Program:

Parents and baby are given appointments about every three weeks.

Parents are taught by physical, occupational, speech/hearing therapists, exercises, play activities, and sound and language experiences which are to be carried on at home and which will assist in child's development.

For pre-school age (3 to 6 years):

Nursery school, kindergarten and pre-primary groups meet twice a week each, children are seen by the three therapists in a group, again assisting in child's development.

For school age (up to age 16):

Therapy appointments on an individual basis are made after regular school hours.

III. *Referral Procedure*

(1) *No child is accepted for any service without a written medical referral from a physician or hospital clinic.*

(2) Mail referral letter or prescription blank to address: Meeting Street School, Children's Rehabilitation Center, 333 Grotto Avenue, Providence 6, R. I.

(3) Physician and parents will receive notification by mail of the two appointments required for diagnostic sessions. *Physician is urged to attend the staff conference on patient.* The complete "team" which has seen your patient will be present and you can ask them questions.

(4) While at the Center for final session, parents are told to get in touch with physician in a week. By the time they call you will have received: (a) a letter summarizing medical findings and recommendations,

concluded on next page

and (b) detailed reports of therapists' and psychologist's findings.

(5) You are then responsible for decisions on: (a) carrying out recommendations made, (b) whether treatment at the Center shall be instituted, and (c) whether you wish us to interpret findings further to the parents when treatment at the Center is not recommended.

(6) When we have received your decisions on the above, we contact the parents or you can ask them to call us.

IV. *Referring Physician's Continuing Role*

You are the responsible medical figure with the child and his family.

Annual written summary reports are mailed to you but at any time we will give interim reports either in writing or over the telephone. If your secretary will call us four days before a patient's appointment in your office, or hospital clinic, we will have a report on your desk in time.

V. *Policy of Meeting Street School re fees*

No child is refused service because of inability to pay the clinic fees.

Any request for adjustment, however, must be made by the parents to the social worker.

Diagnostic Service—$25.00 (includes services listed above).

Infant program—3 therapists see the parents and child—$4.00.

Pre-school groups—3 therapists work together with a group—$1.50 each time child attends.

Therapy by appointment—1 therapist $2.00.

Parent counselling is part of the above services. No separate fee charged.

* * *

Meeting Street School, Children's Rehabilitation Center, is an *Easter Seal* service. It is supported by the annual *Easter Seal Campaign,* by gifts and bequests of interested individuals and organizations, by the small fee charged, by research grants.

HOSPITAL USE BY DIAGNOSIS: A STUDY IN CONTRASTS*

Given a variation in the volume of hospital care used in specific social settings under different types of insurance arrangements, are these differences in use concentrated in one or a few medical diagnoses, or are they spread over the entire spectrum of diagnoses? . . . The preliminary results of a study by Health Information Foundation in which hospital use by diagnosis under Blue Cross in Indiana in 1956 was compared with the much higher rates of use under the Saskatchewan Hospital Services Plan in Canada during 1957.

Briefly, hospital use was higher in Saskatchewan than in Indiana for admissions, length of stay, and annual patient-days. Part of this higher use in Saskatchewan was due to the less "favorable" age-and-sex composition of its population; but, even with the adjustment for this factor, hospital use there was much higher than under Blue Cross in Indiana. This higher use in Saskatchewan was substantial in each age-and-sex group of the population. By diagnosis, a considerable proportion of the difference between the two experiences was accounted for by diseases of the respiratory system and by obstetrical care. But in addition to these diagnoses, the substantially higher hospital use in Saskatchewan was spread throughout almost the entire range of medical diagnoses.

The relatively high volume of hospital use in Saskatchewan has attracted attention for some years now. It is generally thought to be associated with a number of "social," i.e., nonmedical, factors. For one thing, Saskatchewan provides hospital care under a government insurance plan, financed through various forms of taxation, so that the total cost of hospital care is spread over the entire population, and direct cost barriers to use for any individual are removed. Also, Saskatchewan is primarily rural, and hospital use in rural areas among insured populations has been noted elsewhere to be higher than among insured populations in urban settings. Still another factor: Utilization in Saskatchewan has risen, since the inception of the Plan, along with an increase in hospital beds and facilities.

Each of these factors, and others as well, is in some way relevant to the comparison between Saskatchewan and Indiana. However, the purpose of this study was not to dwell on these social factors but rather, taking them as given, to explore in detail the medical causes, or diagnoses, accounting for the higher hospital use in Saskatchewan than in Indiana. . . .

Data for admission rates by sex were available from Indiana only for admissions of persons aged 20 and over. In both experiences admission rates for females at ages 20-34 and 35-49 exceeded those for males by a wide margin, and this held true even with obstetrical care excluded. At ages 50-64 and 65 and over, again in both experiences, admission rates for females continued to exceed those for males, but the margin of excess was much smaller.

In summary, part of the higher hospital use in Saskatchewan was due to differences in the age-and-sex compositions of the two populations, and also to proportionately greater use of hospitals in Saskatchewan for obstetrical care and respiratory diseases. In addition, however, hospital use in Saskatchewan was higher for nearly all major diagnostic categories and for each age-and-sex group.

**Reprinted from* PROGRESS IN HEALTH SERVICES, published by the Health Information Foundation, Vol. X, No. 1, January, 1961.

LEST WE FORGET

Extension of Remarks of HON. BEN F. JENSEN, *of Iowa* in the House of Representatives

Monday, January 30, 1961

MR. JENSEN. Mr. Speaker, under leave to extend my own remarks in the RECORD, I include therein the short story of freemen on the sure road to slavery.

Now, altogether, Americans, let us put our feet heavy on the proper brakes, before we suffer the same fate as has every nation on earth that followed too long the call of the Federal regimentors and reckless spenders of the people's tax dollars.

The Story of 10 Little Free Workers

(These are the workers: railroader, doctor, lineman, miner, steelworker, farmer, lawyer, grocer, salesclerk, reporter)

Ten little free workers in this country fine and fair.
But if you cherish your freedom—worker have a care.
Ten little free workers—railroader was doing fine
Until the Socialists got him—then there were nine.
Nine little free workers laughed at railroader's fate
Along came Federal medicine—then there were eight.
Eight little free workers thought this country heaven
But the Government took over utilities, then there were seven.
Seven little free workers—till the miners got in a fix.
Uncle said coal's essential and took over leaving six.
Six little free workers till the day did arrive
The steel mills, too, were federalized—then there were five.
Five little free workers—but the farmers are free no more,
The farms have been collectivized—that leaves only four.
Four little free workers till the Government did decree
All must have free legal advice—then there were three.
Three little free workers—the number is getting few,
But with Government groceries selling food—then there were two.
Two little free workers—our story's almost done,
With clerks at work in Federal stores—that leaves only one.
One little free worker—the reporter son-of-a-gun
Mustn't criticize Government—so now there are none.
Ten little workers—but they are no longer free
They work when and where ordered, and at a fixed rate you see,
And it all could have been prevented if they'd only seen fit to agree
And work together instead of saying, "It never can happen to me."

... Reprinted from the CONGRESSIONAL RECORD, January 30, 1961.

MANAGEMENT OF DIFFICULT GASTROENTEROLOGICAL PROBLEMS

concluded from page 154

[18]Krahl, M. E.; Keltch, A. K., and Clowes, G. H. A.: The Role of Changes in Extracellular and Intracellular Hydrogen Ion Concentration in the Action of Local Anesthetic Bases, J. Pharmacol. & Exper. Therap. 68:330-50, 1940

[19]Glassman, J. M.; Hudyma, G. M., and Seifter, J.: Comparative Potencies of a New Series of Local Anesthetics, J. Pharmacol. & Exper. Therap. 119:150, 1957



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- That the December birth rate jump is highest among middle income families, lower among high income families and lowest among low income families.
- That about 65 per cent of the babies born in the U.S. each year have part of their initial medical expenses paid by health insurance.

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RHODE ISLAND

Medical Journal

150th Annual Meeting
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. . . See page 200

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oflavin, mg.	0.6	50
cinamide, mg.	5.0	50
cium, Gm.	0.5	67
sphorus, Gm.	0.4	53
, mg.	4	40
ine, mcg.	60	60
min E (Int. Units)	2.5	
idoxine, mg.	0.4	
min B_{12}, mcg.	0.5	
cium pantothenate, mg.	2.0	
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references

(1) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (2) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (3) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960. (4) Shaw, J. H., in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, ed. 2, Philadelphia, Lea & Febiger, 1960, pp. 558-601. (5) Campbell, D. G.: *ibid*, pp. 888-910. (6) Abbott, W., in Allison, J. B.: Ann. New York Acad. Sc. *69*:1018-1022 (Jan. 10) 1958.

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THE WASHINGTON SCENE

A Report Prepared by the Washington Office of the American Medical Association

THE MEDICAL PROFESSION, the U.S. Public Health Service and the National Foundation are working together in an all-out drive to get as many persons as possible to take Salk vaccine shots before the summer polio season starts.

The Sabin live polio vaccine will not be available in quantity this year.

The Salk vaccine campaign drive is directed particularly at children and younger adults in the lower economic groups.

Doctor Julian P. Price, Florence, S.C., chairman of the American Medical Association's Board of Trustees, pointed out that many children and younger adults in the lower income groups have not been inoculated against polio.

"As long as 'islands of unvaccinated persons' exist even within well-vaccinated communities, polio epidemics remain a serious threat," Doctor Price said.

Doctor Luther L. Terry, Surgeon General of the Public Health Service, emphasized the need for immunizing infants. He also said that the PHS will encourage behavioral studies to determine reasons why some people refuse to take polio shots. It is hoped that then methods may be devised to overcome such refusal.

Doctor Terry called particular attention to the findings of the PHS's Advisory Committee on Poliomyelitis Control that the recommended dosage schedules may be modified to permit the administration of three shots of Salk vaccine before summer to persons who have not had any vaccine before.

Doctor Price stressed that success of the "babies and breadwinners" polio vaccine campaign depends on joint activity at the local level by medical societies, boards of health and voluntary health agencies. He expressed confidence that the more than 2,000 state and county medical societies throughout the country would co-operate wholeheartedly.

"Contrary to recent reports (in Scripps-Howard newspapers)," Doctor Price said, "the A.M.A. is strongly behind every effort to encourage the public to take advantage of the Salk vaccine without delay."

The Advisory Committee urged that "immediate steps . . . be taken by all interested groups to intensify drives for vaccination with the formalin-inactivated (Salk) vaccine." The Committee also endorsed the plan to direct the campaign particularly at the lower socioeconomic and younger age groups.

The Committee recommended that the first available supplies of the Sabin live, oral vaccine be utilized in the following priority order:

1. Epidemic control, investigations and community studies.
2. Immunization of infants and preschool children.
3. Selected area immunization of those segments of the population that are least well immunized.

* * *

Congress now has before it legislation to carry out all of President Kennedy's broad health program, but it is doubtful that the lawmakers will act upon some of it this year.

Kennedy health legislation sent to Congress recently included bills on medical education and federal grants for nursing homes and other community facilities.

The Chief Executive also recommended an expanded program to combat water pollution. He requested Congress to authorize federal grants of $125 million a year for ten years to help states forming interstate water pollution control agencies. He also recommended increased federal aid to communities building sewage treatment plants.

The President proposed creation of a special unit in the Public Health Service to handle both air and water pollution matters.

In accompanying letters to the presiding officers of the House and the Senate, Kennedy said he regarded his medical education proposals as the keystone of the over-all health program because "we are not presently training enough (physicians) to keep up with our growing population."

The other bill would "make possible a substantial addition to the number of nursing home facilities to care for long-term patients, and . . . help relieve the shortages of home health care programs," Kennedy said.

The medical education measure would authorize federal grants for scholarships for medical and dental students. Each medical and dental school would

concluded on page 193

ANNOUNCING—
SPECIFICALLY FOR
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November, 1960

STAPHCILLIN™

(sodium dimethoxyphenyl penicillin)

For Injection

DESCRIPTION

STAPHCILLIN is a unique new synthetic parenteral penicillin produced by Bristol Laboratories for the specific treatment of staphylococcal infections due to resistant organisms. Its uniqueness resides in its property of resisting inactivation by staphylococcal penicillinase. It is active against strains of staphylococci which are resistant to other penicillins.

Each dry filled vial contains: 1 Gm. STAPHCILLIN (sodium dimethoxyphenyl penicillin), equivalent to 900 mg. dimethoxyphenyl penicillin activity.

INDICATIONS

STAPHCILLIN is recommended as specific therapy only in infections due to strains of staphylococci resistant to other penicillins, e.g.:

Skin and soft tissue infections: cellulitis, wound infections, carbuncles, pyoderma, furunculosis, lymphangitis and lymphadenitis.

Respiratory infections: staphylococcal lobar or bronchopneumonia, and lung abscesses combined with indicated surgical treatment.

Other infections: staphylococcal septicemia, bacteremia, acute or subacute endocarditis, acute osteomyelitis and enterocolitis.

Infections due to penicillin-sensitive staphylococci, streptococci, pneumococci and gonococci should be treated with Syncillin® or parenteral penicillin G rather than STAPHCILLIN. Treponemal infections should be treated with parenteral penicillin G.

DOSAGE AND ADMINISTRATION

STAPHCILLIN is well tolerated when given by deep intragluteal or intravenous injection.

As is the case with other antibiotics, the duration of therapy should be determined by the clinical and bacteriological response of the patient. Therapy should be continued for at least 48 hours after the patient has become afebrile, asymptomatic and cultures are negative. The usual duration has been 5-7 days.

Intramuscular route: The usual adult dose is 1 Gm. every 4 or 6 hours. Infants' and children's dosage is 25 mg. per Kg. (approximately 12 mg. per pound) every 6 hours.

Intravenous route: 1 Gm. every 6 hours using 50 ml. of sterile saline solution at the rate of 10 ml. per minute.

**Warning:* Solutions of STAPHCILLIN and kanamycin should not be mixed, as they rapidly inactivate each other. Data on the results of mixing STAPHCILLIN with other antibiotics are being accumulated.

DIRECTIONS FOR RECONSTITUTION

Add 1.5 ml. sterile distilled water or normal saline to a 1 Gm. vial and shake vigorously. Withdraw the clear, reconstituted solution (2.0 ml.) into a syringe and inject. The reconstituted solution contains 500 mg. of STAPHCILLIN per ml. Reconstituted solutions are stable for 24 hours under refrigeration.

For intravenous use, dilute the reconstituted dose in 50 ml. of sterile saline and inject at the rate of 10 ml. per minute.

*This statement supersedes that in the Official Package Circulars dated September and/or October, 1960.

(continued)

MICROBIOLOGICAL AND PHARMACOLOGICAL PROPERTIES

In vitro studies show that STAPHCILLIN is a bactericidal penicillin with activity against staphylococci resistant to penicillin G. Strains of staphylococci so far tested have been sensitive to STAPHCILLIN *in vitro* at concentrations of 1-6 mcg. per ml. These levels are readily attained in the blood and tissues by administration of STAPHCILLIN at the recommended dosage. This unique attribute is probably due to the fact that STAPHCILLIN is stable in the presence of staphylococcal penicillinase. STAPHCILLIN also resists degradation by *B. cereus* penicillinase. The antimicrobial spectrum of STAPHCILLIN with regard to other microorganisms is qualitatively similar to that of penicillin G; but considerably higher concentrations of STAPHCILLIN are required for bactericidal activity than is the case with penicillin G.

STAPHCILLIN is rapidly absorbed after intramuscular injection. Peak blood levels (6-10 mcg./ml. on the average after a 1.0 Gm. dose) are attained within 1 hour; and then progressively decline to less than 1 mcg. over a 4 to 6 hour period. It is poorly absorbed from the gastrointestinal tract. STAPHCILLIN is rapidly excreted by the kidney.

As shown by animal studies, STAPHCILLIN is readily distributed in body tissues after intramuscular injection. Of the tissues studied, highest concentrations are reached in the kidney, liver, heart and lung in that order; the spleen and muscles show lower concentrations of the antibiotic. STAPHCILLIN diffuses into human pleural and prostatic fluids, but its diffusion into the spinal fluid has not yet been completely studied. However, one patient with meningitis showed a significant concentration in his spinal fluid while on STAPHCILLIN therapy.

Toxicity studies with STAPHCILLIN and penicillin G in animals show that they have approximately the same low order of toxicity.

Certain staphylococci can be made resistant to STAPHCILLIN in the laboratory, but this resistance is not related to their penicillinase production. During the clinical trials, no STAPHCILLIN-resistant strains of staphylococci were observed or developed; the possibility of the emergence of such strains in the clinical setting awaits further observation.

PRECAUTIONS

During the clinical trials, several mild skin reactions, e.g., itching, papular eruption and erythema were observed both during and after discontinuance of STAPHCILLIN therapy. Patients with histories of hay fever, asthma, urticaria and previous sensitivity to penicillin are more likely to react adversely to the penicillins. It is important that the possibility of penicillin anaphylaxis be kept in mind. Epinephrine and the usual adjuvants (antihistamines, corticosteroids) should be available for emergency treatment. Because of the resistance of STAPHCILLIN to destruction by penicillinase, parenteral *B. cereus* penicillinase may not be effective for the treatment of allergic reactions. Information with regard to cross-allergenicity between penicillin G, penicillin V, phenethicillin (Syncillin) and STAPHCILLIN is not available at present. If superinfection due to Gram-negative organisms or fungi occurs during STAPHCILLIN therapy, appropriate measures should be taken.

SUPPLY

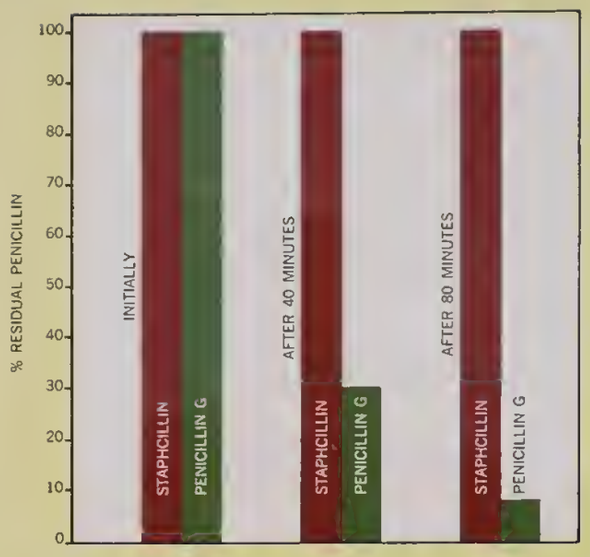
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sodium dimethoxyphenyl penicillin
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1 STAPHCILLIN is effective because it retains its antibacterial activity despite the presence of staphylococcal penicillinase.

2 The clinical effectiveness of STAPHCILLIN has been confirmed by dramatic results in a wide variety of infections due to "resistant" staphylococci, many of which were serious and life-threatening.

Like other penicillins:

STAPHCILLIN has no significant systemic toxicity. It is well tolerated locally, and pain or irritation at the injection site is comparable to that following the injection of penicillin G. *In occasional cases, typical penicillin reactions may be experienced.*

PROFESSIONAL INFORMATION SERVICE — The attached Official Package Circular provides complete information on the indications, dosage, and precautions for the use of STAPHCILLIN. If you desire additional information concerning clinical experiences with STAPHCILLIN, the Medical Department of Bristol Laboratories is at your service. You may direct your inquiries via collect telephone call to New York, PLaza 7-7061, or by mail to Medical Department, Bristol Laboratories, 630 Fifth Ave., N. Y. 20, N. Y.

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THE WASHINGTON SCENE

concluded from page 192

be eligible for a total of scholarship grants equal to $1500 times one fourth of the enrollment after the program had been in effect for four years. The maximum individual scholarship would be $2,000 a year. Participating schools also would be eligible for federal grants of $1,000 per scholarship to help pay a school's operating expenses.

The community health facilities bill would increase the annual authorization for federal grants for construction of nonprofit nursing homes from $10 million to $20 million and raise the minimum state allotment from $50,000 to $100,000 per year. It also would broaden the PHS surgeon general's authority to conduct research, experiments and demonstrations on development and utilization of hospital services, facilities and resources to include other medical facilities.

Federal grants also would be authorized to help finance studies, experiments and demonstrations by states and other nonfederal agencies for development of new or improved methods of providing health services outside hospitals, particularly for chronically ill or aged persons.

The A.M.A. found "much to applaud" in Kennedy's over-all health program, but stood fast in opposing the proposal to provide elderly persons with health care through the social security system. Doctor F. J. L. Blasingame, executive vice president of the A.M.A., said:

"We support the broad principles and the general goals of the President's program, but we cannot support his proposal for hospitalization and nursing home care for persons over sixty-five under social security.

"In fact, after studying this section of the President's plan, the A.M.A. more strongly than ever reaffirms its support of the Kerr-Mills law."

DID YOU KNOW?

- That in 1960 there were more than 41,000 cases of hepatitis, a stubborn virus infection of the liver, and this was an increase of 77 per cent over the number of cases in 1959.
- That in the first six weeks of 1961 there were 9,576 cases of hepatitis, an increase of 123 per cent over the 4,300 cases reported for the same period in 1960.
- That the incidence of hepatitis is up this year in 43 states, but is lower in the following seven states —Arizona, Hawaii, Idaho, New Mexico, North Dakota, Virginia, and Wisconsin.
- That in this year's first six weeks, three states averaged more than 100 hepatitis cases a week— California, Ohio, and Tennessee.
- That infectious hepatitis most often strikes persons between the ages of five and 15.

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SPECIAL PROBLEM: ANXIETY-TENSION

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SPECIAL PROBLEM: OVERWEIGHT

No patient developed voracious appetite on triamcinolone. Preferable for the overweight person whose appetite is undesirably stimulated by other steroids. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

SPECIAL PROBLEM: EDEMA

Since it does not produce edema, triamcinolone is useful in rheumatoid arthritis patients with cardiac decompensation who need steroid therapy. (Hollander, J. L.: *J.A.M.A.* 172:306 [Jan. 23] 1960.)

SPECIAL PROBLEM: HYPERTENSION

Triamcinolone may be included among the currently available antirheumatic steroids having the least tendency to cause sodium retention. (Ward, L. E.: *J.A.M.A.* 170:1318 [July 11] 1959.)

Hypertension did not result from triamcinolone therapy. Existing hypertension was reduced sometimes. This may have been due to lack of sodium retention. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

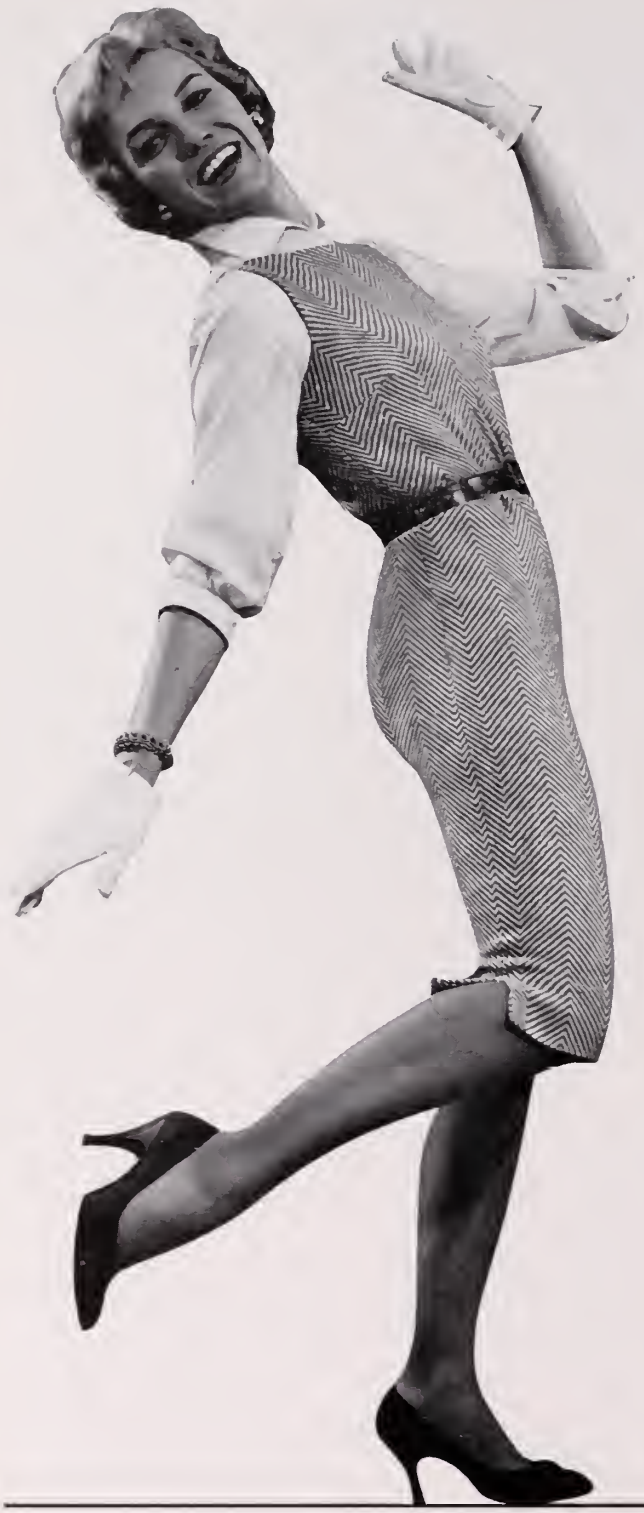
Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of rheumatoid arthritis, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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PROGRAM OF THE 150th ANNUAL MEETING

THE RHODE ISLAND MEDICAL SOCIETY

May 2 and 3, 1961 — *At the Rhode Island Medical Society Library*

TUESDAY, MAY 2

7:00 P.M. REGISTRATION AND TOUR OF TECHNICAL EXHIBITS

8:15 P.M. CALL TO ORDER

Greetings: EARL J. MARA, M.D., President

PRESENTATION OF AWARDS TO SCIENCE FAIR WINNERS

8:30 P.M. "CONDITIONS OF THE CARDIOVASCULAR SYSTEM AMENABLE TO SURGERY"

FRANK GLENN, M.D.
of New York, New York

(Lewis Atterbury Stimson Professor of Surgery and Chairman of Department, Cornell University Medical College; Surgeon-in-Chief, the New York Hospital)

9:15 P.M. THE CHARLES VALUE CHAPIN ORATION
"THE CHANGING SCENE IN MEDICAL EDUCATION AND PRACTICE"

ALEX M. BURGESS, SR., M.D.
of Providence, Rhode Island

(Director of Professional Education, Miriam Hospital, Providence, and Memorial Hospital, Pawtucket; Area Consultant, Veterans Administration; Secretary-Treasurer, Association of Hospital Directors of Medical Education; Vice Chairman, National Committee for Resettlement of Foreign Physicians; former member and Vice Chairman, Joint Commission for Accreditation of Hospitals; former member, American Board of Internal Medicine; Second Vice President, American College of Physicians, 1953-1954; Past President, New England Diabetes Association, Providence Medical Association, and Rhode Island Alpha of Phi Beta Kappa)

10:15-11:00 P.M. TOUR OF TECHNICAL EXHIBITS

WEDNESDAY, MAY 3

10:00 A.M. REGISTRATION AND TOUR OF TECHNICAL EXHIBITS

10:30 A.M. CALL TO ORDER

Presiding: FRANK W. DIMMITT, M.D., Vice President

"INDICATIONS FOR REFERRALS TO AN OUT-PATIENT PSYCHIATRIC CLINIC"

CHARLES H. JONES, M.D.
of Providence, Rhode Island

(Superintendent, Butler Health Center, Providence; former Superintendent, Northern State Hospital, Sedro Wooley, Washington)

11:00 A.M. "PERIPHERAL VASCULAR DISEASE"—A PANEL DISCUSSION

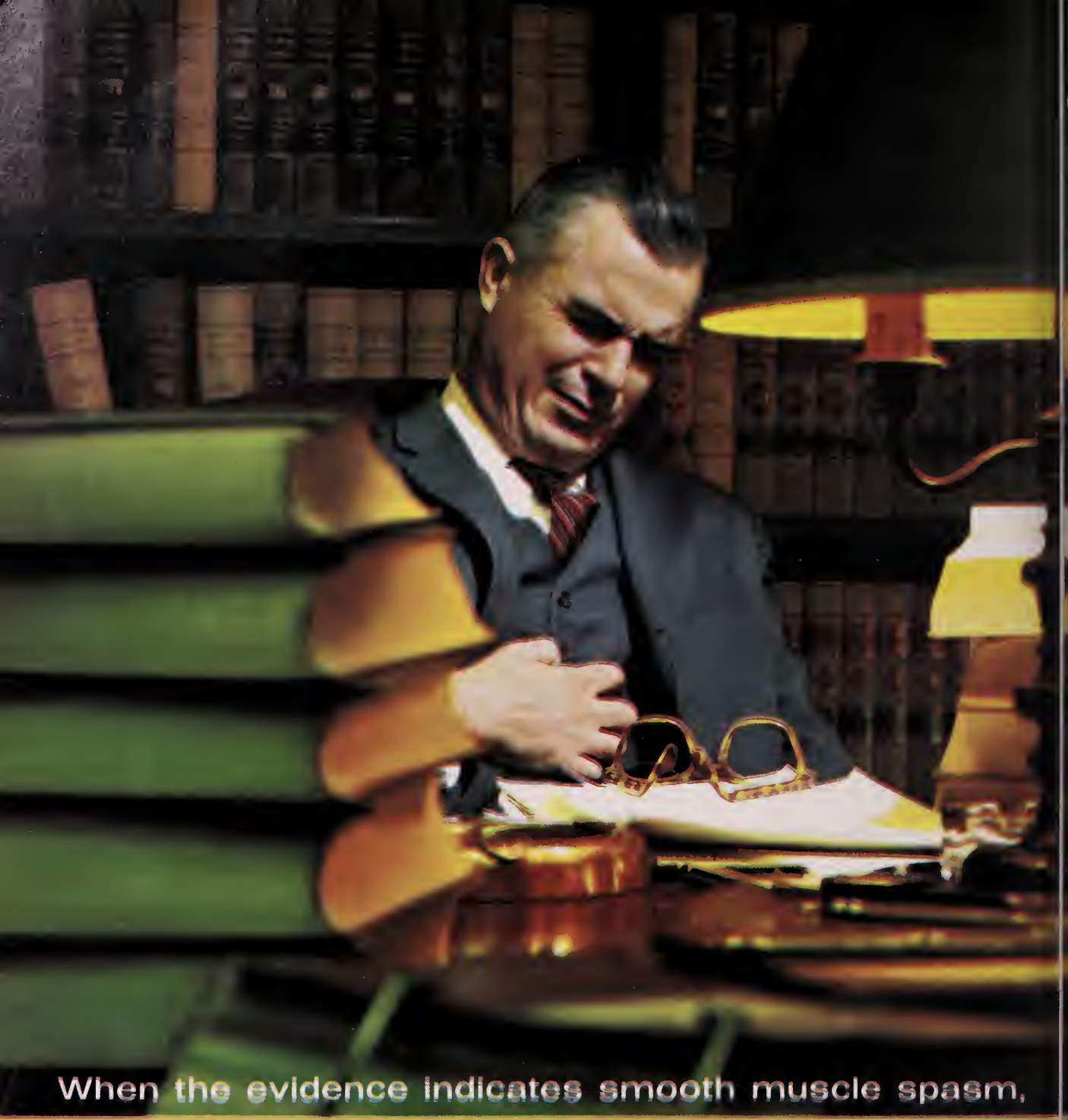
BY RHODE ISLAND PHYSICIANS

Moderator: JESSE P. EDDY, 3D, M.D.

(Director, Vascular Service, Memorial Hospital, Pawtucket; Acting Association Surgeon, Rhode Island Hospital, Providence)

continued on page 202


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Literature available to physicians on request.

REFERENCES: 1. Carpenter, E. B.: Southern M.J. 51:627, 1958. 2. Forsyth, H. F., J.A.M.A. 167:163, 1958. 3. Hudgins, A. P.: Clin. Med. 6:2321, 1959. 4. Grisolia, A., and Thomson, J. E. M.: Clin. Orthopaedics 13:299, 1959. 5. Lewis, W. B.: California Med. 90:26, 1959. 6. O'Doherty, D. S., and Shields, C. D.: J.A.M.A. 167:160, 1958. 7. Park, H. W.: J.A.M.A. 167:168, 1958. 8. Plumb, C. S.: Journal-Lancet 78:531, 1958. 9. Poppen, J. L., and Flanagan, M. E.: J.A.M.A. 171:298, 1959. 10. Schaubel, H. J.: Orthopedics 1:274, 1959.

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PROGRAM OF THE 150th ANNUAL MEETING

continued from page 200

PANELISTS:

WILLIAM P. CORVESE, M.D.
(Assistant Surgeon, Department of Surgery, Rhode Island Hospital)

SEEBERT J. GOLDOWSKY, M.D.
(Surgeon-in-Chief, Miriam Hospital; Director, Peripheral Vascular Clinic, Rhode Island Hospital)

STEPHEN J. HOYE, M.D.
(Assistant Surgeon, Vascular Service, Memorial Hospital, Pawtucket; Assistant Surgeon, Miriam and Our Lady of Fatima hospitals, Providence; Instructor in Surgery, Harvard Medical School)

LESTER L. VARGAS, M.D.
(Director, Cardiovascular Research Laboratory, Rhode Island Hospital; Assistant Clinical Professor of Surgery, Tufts University School of Medicine)

12:30 P.M. RECESS. Buffet Luncheon at Library
TOUR OF TECHNICAL EXHIBITS

1:30 P.M. CALL TO ORDER

Presiding: SAMUEL ADELSON, M.D., President-elect

Recognition of Delegates from State Medical Associations

1:45 P.M. "NOTES ON THE BEGINNINGS OF THE RHODE ISLAND MEDICAL SOCIETY"

SEEBERT J. GOLDOWSKY, M.D.
of Providence, Rhode Island
(Editor-in-Chief, the RHODE ISLAND MEDICAL JOURNAL; Surgeon-in-Chief, Miriam Hospital)

2:15 P.M. "THE DIAGNOSTIC VALUE OF SCINTILLATION SCANNING WITH VARIOUS COMPOUNDS OF RADIOACTIVE IODINE AND RADIOACTIVE MERCURY"

EDWARD A. CARR, JR., M.D.
of Ann Arbor, Michigan
(Associate Professor of Internal Medicine (Radioscope Unit), and Associate Professor of Pharmacology, University of Michigan Medical School; former Instructor in Pharmacology at Harvard Medical School; Exchange Fellow at St. Bartholomew's Hospital, London; former Assistant Professor at Michigan)

2:45 P.M. "DIURETIC THERAPY TODAY"

MILTON L. KRAMER, M.D.
of New York, New York
(Professor of Clinical Medicine, Cornell University Medical School; Attending Physician, New York Hospital; Director of Medicine, Hospital for Joint Diseases; Consultant, New York Infirmary for Women)

3:15-3:45 P.M. INTERMISSION. TOUR OF TECHNICAL EXHIBITS

3:45 P.M. "IS AMERICAN MEDICAL CARE THE BEST IN THE WORLD?"

OSLER PETERSON, M.D.
of Boston, Massachusetts
(Visiting Lecturer, Department of Preventive Medicine, Harvard Medical School; former Staff Member, and Assistant Director for Medical Education and Public Health, the Rockefeller Foundation, New York)

4:15 P.M. PRESIDENTIAL ADDRESS

EARL J. MARA, M.D.
of Pawtucket, Rhode Island
(President, the Rhode Island Medical Society)

4:45 P.M. GENERAL SESSION OF THE RHODE ISLAND MEDICAL SOCIETY

BUSINESS MEETING

(Installation of officers for 1961-1962)

5:15 P.M. RECESS. TOUR OF TECHNICAL EXHIBITS

EVENING SESSION

6:00-7:00 P.M. RECEPTION. Foyer, seventeenth floor, Sheraton-Biltmore Hotel, Providence
(For members of the Society and guests)

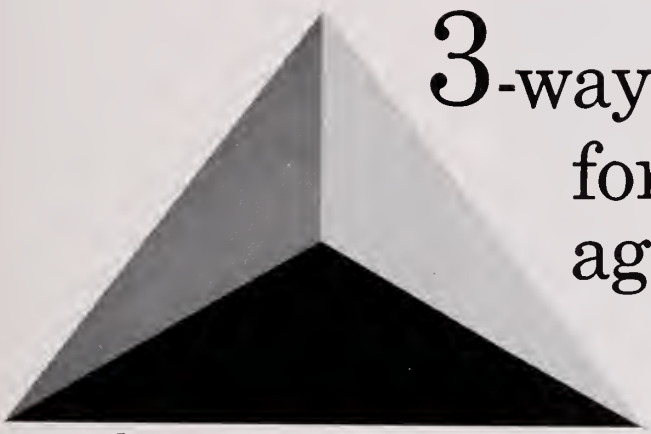
7:00 P.M. ANNUAL DINNER. Ballroom, seventeenth floor, Sheraton-Biltmore Hotel

Advance reservation required

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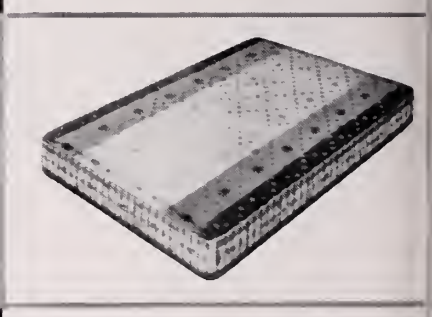
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References: 1. California Medicine 80:375, 1954; 2. Peterson, D. M.: J. Missouri S.M.A. 40:279, 1943; 3. Lindberg, H. A., Treger, N. V., Barker, M. H.: Quarterly Bull., Northwestern Univ. Med. School, Vol. 22, No. 1, 59, 1948; 4. Davis, L.: Postgraduate Med. 9:321, 1951; 5. Goodman and Gilman, The MacMillan Co., New York, 1958.



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SURGICAL RESEARCH AND HUMAN PHYSIOLOGY*

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IT IS NOT OFTEN that a surgeon is provided the opportunity to discuss the contributions of surgical research to human physiology. In fact, even as late as the turn of the century, such a topic would have been a very sterile one. But one need only review the contents of our recent surgical journals to note that a "new look" has come to surgical endeavor. At the last meeting of the American Surgical Association, nine of the papers were out-and-out contributions to mammalian physiology. The last meeting of the Society of University Surgeons had thirteen papers on physiology out of a total of twenty-three presentations. Much has been achieved since the days of de la Martinière who in 1748 had to plead with the King of France for retaining the right of education and academic standing for surgeons.

The turn of the tide came in the eighteenth century with John Hunter of St. George's Hospital, London. We may dwell briefly on this "rough and tough" Scot, for in him are seen many of the characteristics of the surgical investigator of today.[16] He found surgery an empiric art and left it well on the way toward the acquisition of a scientific, physiologic foundation. Hunter was an extraordinary person. Unlike his brother William, famous in his own right, he had had little education. After he had fairly become established in London, he went to Oxford, but only for a brief time, for he left quite promptly with unconcealed lack of appreciation of what Oxford had to offer. There even is question about his date of birth, being recorded in Calderfield parish, village of Kilbride, as the thirteenth of February, 1728. The family Bible records the birth of John, the last of ten children, as the ninth of February; John himself, and the Royal College of Surgeons took the fourteenth of February as the official birthday.

François Magendie, father of modern physiology, is credited with insistence upon experimentation and observation before accepting physiologic hypotheses. His period of influence was early in the nineteenth century. Note that in a letter to Edward Jenner on the subject of hibernation in hedgehogs, Hunter had written: "I think your solution is just; but why think? Why not experiment?" This was written at about the time that Magendie was born. Well ahead of his time, Hunter was the prototype of the biologic surgeon of today. He was interested in body temperature and hibernation. His contemporaries considered him impractical. Who could have foretold that after lying dormant for two centuries surgical interest in body temperature and hypothermia would reawaken with great vigor?[5,13,33]

Hunter insisted on objective, accurate observation, an essential feature of surgical research. For example, consider what he wrote[19] about the physiology of hemorrhage in man: "Nothing affects the system more than too great a loss of blood; the body becomes languid and cold, and the heart seems disposed to suspend its action, as if a natural method was instituting to stop the bleeding, and also to keep the actions of the machine proportionate to its power. But I know not what the cold sweating is to do. Animal cannot subsist long in this state, but the constitution will begin to rouse up its action again; there will be a full pulse and seeming strength, but if the weakness is very great, this apparent action or reaction of the system does not long continue. When the pulse is strong and the body warm, it would appear an indication for bleeding; but this is improper, and the loss of a small quantity of blood at this time would probably kill the patient. The rising of the pulse in hemorrhage is often an effort of Nature to live, and cannot be reduced, although it still further increases the irritability of the system." In this statement, Hunter outlined several of the important features of hemorrhagic shock as we recognize them today. Compare this lucid account with that of a description of what may have been wound

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shock written some four decades earlier (LeDran, 1737): "When the patient turns yellow, green, or leaden colored in a short time after being wounded, it is undoubtedly owing to this, that the shock or commotion has stopped the secretion of bile, or perhaps some other liquor. And that excrementitious fluid not being so freely separated from the whole mass, as formerly; and at last transuding through the sides of small vessels, communicates its hue to every part."

Until well into the nineteenth century, the art of surgery was based upon anatomy. The successful surgeon was one so thoroughly and precisely familiar with anatomic details that he could do an operation with great dispatch. Chairs of Surgery and Anatomy were usually combined. Philip Syng Physick, of the University of Pennsylvania, was the first professor of surgery apart from anatomy in this country. He was appointed in 1805. The introduction of anesthesia (1846) and the development of aseptic technique opened new horizons for the surgical art. In 1881, at the Allgemeine Krankenhaus of Vienna, Billroth resected the pyloric end of the stomach for cancer, and abdominal surgery became established. That same year, anterior gastrojejunostomy was done for ulcer. At about this time, emphasis passed from anatomy to pathology, for further developments in surgery depended upon the concept of organ specificity in clinical medicine, so well documented by Morgagni in 1761 ("De sedibus et causis morborum per anatomen indagatis"). Little would be accomplished by surgical removal of the appendix if appendicitis were not an organ-specific and limited disease.

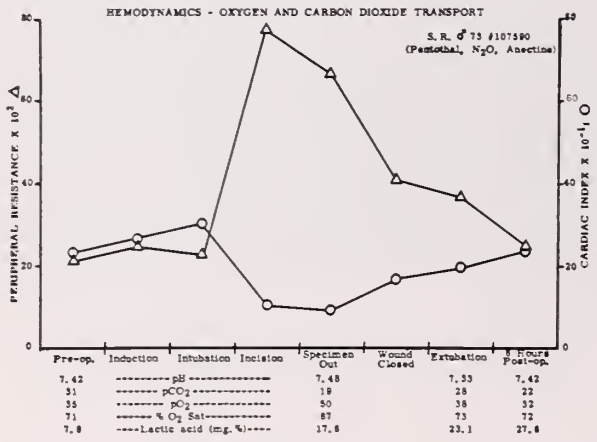


FIGURE 1

Example of physiologic and biochemic data obtained in connection with an operative procedure, cholecystectomy and choledochostomy under pentothal-nitrous oxide-anectine anesthesia in a seventy-three-year-old man with gallstones and pulmonary emphysema. Not shown in the chart is the right auricular pressure which rose from a preoperative level of 5 mm. Hg. to 10 and 12 mm. during induction of anesthesia and intubation; to 20 and 16 mm. Hg. during the intra-abdominal operation and gradually to the preoperative level when the incisions were closed and the intratracheal tube was removed. The rise in the auricular pressure paralleled the rise in peripheral resistance and inversely followed the fall in cardiac index. Of particular interest is the fact that the systemic blood pressure and the pulse rate remained essentially unchanged while these drastic "occult" effects on hemodynamics were being recorded. The blood pressure is maintained at the expense of tissue perfusion. This leads to metabolic or subliminal perfusion acidosis manifested by the increased lactic acid concentration but compensated for by alterations in carbonic acid. At the time the specimen was being removed, there was actually overcompensation and a mild alkalosis in the face of metabolic acidosis. These events would not have been detected without special investigation. Understanding of this sort of applied physiology is essential to further surgical progress.

Surgery flourished with surgical pathology of the late nineteenth and early twentieth centuries. But it could progress only so far before its new limitation became the inadequate knowledge and understanding of human physiology. In order for patients to withstand major surgical procedures, we had to learn with considerable precision the physiologic and biochemic changes (fig. 1) which patients undergo as the result of anesthesia, operation, trauma, and stress.[15,23,26] Secondly, Billroth's demonstration that partial gastrectomy is technically feasible would have had little influence upon progress in abdominal surgery if it had not been demonstrated that life is reasonably normal after partial gastrectomy and, with limitations, after total gastrectomy. In other words, the physiologic limitations of surgical procedures and how to cope with them had to be learned. Finally, surgeons became compelled to learn more about human physiology because the concept of surgically modifying certain functions of the body, pathologic or otherwise, stimulated surgical enthusiasm toward a new horizon, that of "physiologic surgery" in which we presently find ourselves.

It is not surprising, then, that research by surgeons has unraveled many of the mysteries of the physiology of the endocrine glands, of the gastrointestinal tract, of the cardiovascular and cardiopulmonary systems, of the somatic and autonomic nervous systems, and of the intricate modifications, adjustments and bodily redistributions of water and electrolytes and of other elements of the "milieu intérieur." It is clearly impossible to review the contributions from surgical research to these many fields. I have taken the liberty of choosing limited aspects of two fields simply for illustration. I chose the fields of gastric and circulatory physiology.

1. *Physiology of Gastric Secretion.* In recent years, the physiology of gastric secretion has interested surgeons because of the relationship which is thought to exist between acid peptic activity and ulcerations of the esophagus, stomach, duodenum,

and other parts of the gastrointestinal tract. While aimed at practical application, studies in this area have resulted in a great fund of information regarding the physiology of this system.

The greatest single contribution to the physiology of digestion was made by William Beaumont, a native of Lebanon, Connecticut, born on November 21, 1785, and later a surgeon in the United States Army.[3] He was a surgeon *in fact*, and not alone by act of Congress. For example, after working with the wounded in the War of 1812 for thirty-six hours in succession, he wrote: "Dressed upwards of 50 patients—from simple contusions to the worst of compound fractures—more than half the latter. Performed two cases of amputation and one of trepaning. At 12:00 p.m. retired to rest my fatigued body and mind." Beaumont made his observations on gastric digestion upon Alexis St. Martin, a seventeen-year-old boy, five feet, five inches tall, who had incurred a usually fatal accidental gunshot wound of the left flank. Powder and duck shot entered the trunk from behind on the left and passed ventrally and medially. The left fifth and sixth ribs were fractured and partly carried away by the shot. The lower lobe of the left lung was lacerated, as were the left diaphragm and the stomach. He saw Alexis twenty-five or thirty minutes after the accident. Parts of the lung and of the stomach were protruding through the wound beneath the left breast.

The details of the accident which resulted in St. Martin's wound are not known with certainty. Some say that he was wounded when a shotgun in the hands of one of a group of people standing about in the Company Store of the American Fur Company was accidentally discharged. "The muzzle was not over three feet from him—I think not more than two. The wadding entered, as well as pieces of his clothing; his shirt took fire; he fell, as we supposed, dead." William Beaumont's son, however, wrote that St. Martin had dangerously wounded himself by the accidental discharge of his (St. Martin's) own gun while hunting.

Prior to Beaumont's observations, knowledge of the physiology of digestion was scant. René-A.-F. de Réaumur (1683-1757), and after him Lazzaro Spallanzani (1729-1799), had disproved the notion that the process of digestion was one of putrefaction. de Réaumur, in 1752, described the solvent action of gastric juice, which he obtained from a pet kite, upon foodstuffs. Spallanzani, in 1782, showed that saliva also had digestive powers and observed that gastric juice, so named by him, acting *in vitro* not only did not cause putrefaction, but prevented it and, if already started, kept the putrefaction from progressing. Neither de Réaumur nor Spallanzani recognized that gastric juice was acid. Indeed, the latter stated that it was neutral. The acidity of gastric juice, now such an important consideration in clinical medicine, was not recognized until John Richardson Young's doctoral dissertation was published in 1803 when he was eighteen years old. While recognizing that gastric juice was acid, Young believed that acidity was due to phosphoric acid, and it was not until 1824 that William Prout demonstrated that acid in gastric juice was muriatic. Beaumont submitted samples of St. Martin's gastric juice to experts such as Professor Robley Dunglison of the University of Virginia and Benjamin Silliman of Yale. There was no question now that the gastric juice contained hydrochloric acid. Furthermore, Beaumont observed that chymification with gastric juice in the stomach or in the test tube was not the same as digestion with hydrochloric and acetic acid. He postulated that some substance other than these acids must be present in gastric juice. Schwann later (1846) showed that this substance was pepsin.

There is little need to recount what Beaumont contributed to our knowledge of the physiology of digestion, but one or two points are worth emphasizing. For the first time, pure uncontaminated gastric juice was obtained and characterized. It did not constantly flow. Rather, it was produced in response to the presence of food in the stomach. The presence in it of free hydrochloric acid was proved beyond doubt. He showed that different foodstuffs are "digested" with different rapidity and remain in the stomach different lengths of time. He described the mechanical activity of the stomach and its importance for "chymification." Of particular significance was the demonstration of the strong effects of the emotions upon the secretion of gastric juice and upon the digestion of food in the stomach. Interestingly, while making these observations regarding the emotions, he made no comment on "psychic" or "appetite" gastric secretion. Finally, Beaumont pointed out some evils of alcoholism, having directly observed the irritant action of spiritous liquors on the gastric lining.

Before leaving our consideration of Beaumont's contributions, it would be of interest to quote some of his remarks which have a bearing on the general philosophy of science. He recognized that, depending upon the state of the individual at the time of the experiment, different results can be obtained at different times. He wrote: "The reader will perceive some slight seeming discrepancies, which he may find it difficult to reconcile; but he will recollect that the human machine is endowed with a vitality which modifies its movements in different states of the system, and probably produces some diversity of effects from the same causes." Beaumont also made an important distinction between fact and interpretation: "I submit a body of facts which cannot be invalidated. My opinions may be doubted,

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denied, or approved, according as they conflict or agree with the opinions of each individual who may read them; but their worth will be best determined by the foundation on which they rest—the incontrovertible facts."

Since Billroth's demonstration in 1881 that partial gastrectomy can be done successfully and Woelfler's demonstration, that same year, of gastrojejunostomy for bypassing peptic ulcer, these and similar procedures have been applied in some form or other for the treatment of peptic ulcer in thousands of patients. The classic work of Pavlov early in the present century had emphasized the importance of the "cephalic" or neural phase of gastric secretion and this led to the exploration of vagus resection for achieving a diminution in the gastric secretion of acid. Careful observation of patients for whom partial gastrectomy, gastrojejunostomy, or vagotomy or combinations of the two were done for peptic ulcer revealed a number of sequellae for which explanations were not readily available, and which led to brilliantly designed experiments for their elucidation. A vast amount of work has been done, employing intricate surgical techniques for the construction of modified Heidenhain and Pavlov gastric pouches and for gastrointestinal transplants.[cf.11,12,14,17,20,22,25,35,36,37] I should like merely to summarize the findings as they relate to our present understanding of the physiology of gastric secretion. They are outlined in tables 1 and 2. Their application to the surgical management of peptic ulcer has not yet been fully exploited.

We cannot leave the field of gastric physiology without a comment on the perplexing relationship between tumors of the endocrine glands and ulcerative lesions of the stomach, duodenum and jejunum. Zollinger and Ellison (1955) first drew attention to the possibility that "nonfunctioning" tumors of nonspecific cells of the pancreatic islets might be ulcerogenic for the gastrointestinal tract. The hyperglycemic-glycogenolytic hormone, glucagon, was implicated. Subsequent observations have cast doubt upon this particular relationship. The tumors may be situated in any of the several endocrine glands (pituitary, adrenal, pancreas, parathyroid) and they may be polyglandular. The gastrointestinal ulcerations and other signs and symptoms of the syndrome are as common with tumors of the parathyroid glands as with tumors of the pancreas. Murphy, *et al.* (1960) in their excellent review have recently suggested that the presence of duodenal and intestinal ulceration could actually be coincidental. Be that as it may, there does appear to be a group of patients with hyperplasia, adenoma, or, in the case of the pancreas, carcinoma of one or more endocrine glands in association with bizarre ulcerations of the duodenum and intestine, very marked gastric hypersecretion, and intractable nonbloody diarrhea. The causal relationship is not clear. Both the gastrointestinal disturbances and the abnormalities of the endocrine glands could be secondary to some master-disturbance not yet uncovered.

2. *Surgical Research and the Circulation.* The physiology of circulation has interested surgeons for centuries. Gerolamus Fabricius ab Aquapendente (1533-1619), professor of surgery and of anatomy at Padua, described the delicate semilunar valves in venous trunks, but erroneously believed that the blood flow in veins was centrifugal in relation to the heart. Harvey's correct account of the circulation of blood required knowledge of the presence of these valves in veins. John Hunter[19] became curious about the development and function of collateral circulation in the antler of the deer without thought of clinical application, but later based upon those observations his argument for tying the femoral artery in the abductor canal, now named after him as Hunter's canal, in cases of popliteal or lower femoral arterial aneurysms.

Interestingly, the functional importance of veins in the circulatory economy was not appreciated until quite recently. To be sure, the arrangement of veins is more like a network than is the arrangement of arteries, and individual veins, including the vena cava, can be interrupted, without jeopardizing the viability of a part. Extensive interference with venous drainage, however, can in fact lead to gangrene as severe as that resulting from arterial interruption. A clinical illustration of this fact is the condition known as phlegmasia cerulea dolens where

TABLE 1
Stimulation of Gastric Secretion

1. Neural (cephalic, "appetite", vagal, psychic).
2. Chemical and mechanical (gastric).
   a. Gastrin (hormone, ΟΡΜΑΩ).
3. Duodenal and intestinal (chemical).
   a. Food partly digested by pepsin and hydrochloric acid.
   b. Products of protein and fat hydrolysis.
4. Stress (?adrenal cortex).

TABLE 2
Inhibition of Gastric Secretion

1. Neural.
   a. Vagal inhibitory fibers.
   b. Sympathetic (splanchnic).
2. Chalones (ΧΑΛΑΩ).
   a. Action of acid upon antrum.
      1) Inhibition of gastrin production.
      2) Stimulation of antral chalone.
   b. Duodenal and intestinal.
      1) Enterogastrone.
         a) Fats, alkaline solutions, concentrated sugar.
3. Liver, (portal hypertension and gastric secretion).

gangrene of the extremity occurs as seriously as it does after the occlusion of major arterial channels.

Some years ago we became interested in the role played by the veins in the circulation of blood in the extremities. Sir George Makins had popularized the concept that when an artery is interrupted and the flow of blood to a limb is thereby limited, interruption of the companion vein improves the circulation. This belief arose from observations on casualties in the Boer War and early in World War I. Our experience in World War II, in which only acute wounds of the arteries were considered, and chronic lesions such as aneurysms and arteriovenous fistulae were excluded, did not support this concept.[10] Early after the war, we investigated the question, using the electrically stimulated skeletal muscle as an index of variations in blood flow. We found that not only did obstruction of the companion vein decrease still further the circulation through muscle already impaired by arterial occlusion,[29] but worsened it. In fact, the evidence was that obstruction of the femoral vein impaired the function of skeletal muscle fully as much as did obstruction of the femoral artery. When both the artery and vein were occluded, improvement did not take place by releasing the artery until the vein, too, was released. This may appear to be a minor point, but the experience with vascular wounds during the Korean conflict suggested that the limb fared less well when the concomitant vein had to be interrupted than when it remained intact.

Surgeons have made other important contributions to the physiology of the circulation in man. The brilliant advances in surgery of the bypassed heart would not be possible without the physiologic understanding of the heart as a pump and without the understanding of the physiology of tissue perfusion. For brief periods of time (up to 30 minutes) the minimal requirement for total perfusion is 30 ml. per kgm. of body weight per minute, approximately half the resting normal cardiac output. This permits barely adequate perfusion of vital organs, but metabolism goes on in large areas of the body with subliminal perfusion and serious metabolic acidosis can develop.[9] For metabolism to be nearly normal, a pump "cardiac" output of about two liters per square meter of surface area is required, a reduction of about 30 per cent from the basal normal. This can be reduced still further by the imposition of hypothermia.[9] The demonstration that the human heart can be rendered asystolic by means of potassium and of acetylcholine, much as in lower mammals, has been of great clinical as well as physiologic importance. Young surgeons at the resident level, together with their preceptors, have contributed to this kind of physiologic knowledge.

Less dramatic, perhaps, but nevertheless intellectually stimulating, is the question of how the circulation in the periphery is regulated, aside from local metabolic effects and variations in the cardiac output and in the viscosity of the blood. We have been interested in this problem for some years, and particularly from the point of view of the nervous control of the small blood vessels. The existence of sympathetic vasodilator fibers in the skin has been suggested by many investigators. The poor results of sympathectomy for advanced vasospastic disease of the hands has been attributed to the possibility that the denervated hand lacks the influence of vasodilator fibers. With Doctor Sarnoff,[27] now working in cardiovascular physiology at the National Institutes of Health, we tested this hypothesis by blocking the peripheral nerves in patients who were maximally vasodilated for thermoregulation. The temperature of the skin did not drop as it would have done had there been effectively active vasodilator fibers of the skin of the digits. Thus, in man, it would appear that the sympathetic outflow to the extremities is vasoconstrictor. Other causes for continued vasoconstriction in the extremities following denervation need to be found.

All who have studied patients after sympathetic denervation of an extremity are aware of the fact that when an excellent result is obtained, in terms of an increase in the circulation approaching maximal vasodilation, the effect is greatest on the very day of operation or, in some cases, the very next day. The effect is never again as great. The rate of blood flow decreases during the subsequent week or ten days to reach a level between maximal vasodilation and the preoperative vasoconstriction in a cool environment. Although the interruption of sympathetic vasodilator fibers has been blamed for poor results after sympathectomy for vasospastic states, it does not readily account for this return of partial vasoconstriction over a period of days. Indirectly, interesting speculations can be made from data obtained in studies of the digital circulation in patients for whom arterial reconstruction was done to relieve obliterative arterial disease of the extremities. These patients show a loss of peripheral vascular resistance distal to the level of arterial obstruction and lasting a few days to several weeks. During this time, although the sympathetic nervous outflow to the limb is intact, reflex or thermoregulatory vasoconstriction is ineffective. It was postulated that this phenomenon could be explained on the basis of medial atrophy as the result of chronic hypotension and that it is no longer demonstrable when medial hypertrophy has taken place after normal intravascular tension has been restored by means of arterial reconstruction. Medial degeneration and hyalinization has been reported in the arterioles of limbs amputated for arteriosclerosis obliterans.[32] In addition, Strandness[31] observed dilation of some of the arterioles which showed a

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thin media such as one would expect to see in veins. On the other hand, it is well known that arteriolar medial hypertrophy occurs when previously normal arterioles are exposed to high intravascular pressures, as in renal hypertension.

These observations can tentatively be applied to the question of the early acquisition of "intrinsic tone" by denervated vascular beds. Denervation decreases vascular resistance in the small arteries as well as in the arterioles. These latter are therefore exposed to higher pressures than normally; their media hypertrophies and develops increased tone, thereby causing a progressive increase in the vascular resistance from the time of denervation until a balance is reached. This explanation would account for the fact that under conditions which acutely induce vasodilation, the normally innervated vascular bed will exhibit a greater blood flow than that which has been denervated for a few days or longer (fig. 2).

The decrease in the effectiveness of sympathetic denervation of the blood vessels when late results are compared with early effects has been attributed to a number of physiologic and anatomic phenomena: sensitization of smooth muscle following denervation, re-innervation of denervated neurons through the process of axonal sprouting, sensitization of partially denervated postganglionic neurons, incomplete anatomic denervation, and regeneration of sympathetic nerve fibers. These several aspects of the physiology of the circulation have received a great deal of attention.[28,24,34] Possibly, the return of vasoconstriction after sympathectomy is conditioned by more than one of the possibilities mentioned. We, as others, have recently been interested in the physiologic significance of extraganglionic sympathetic neurons.[cf.6] Their presence outside the paravertebral ganglia can readily be demonstrated, but Doctor Stephen Kent, working in our laboratories as a tutorial student, could not establish a relationship between the presence of these extraganglionic cells and the recurrence or not of vasomotor control after sympathectomy.

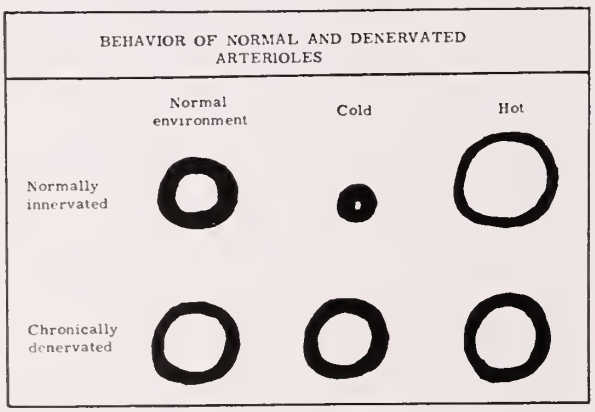


FIGURE 2

A diagram of theoretical changes in the behavior of small blood vessels after denervation. Some degree of medial hypertrophy may take place after denervation so that, in contrast to the comparison on exposure to cold, the vascular resistance of the denervated vessels may be greater than that of the normally innervated structures when exposed to conditions which induce vasodilation.

Having just argued that vasodilator fibers are not present in the sympathetic outflow to the skin, I should now like to turn to an interesting possible exception, namely the skin of the face. When one denervates the extremity, the difference in color and warmth between it and the opposite, still innervated, hand or foot is immediately obvious. Such a difference is not seen in the face. After resection of the stellate ganglion, there are visible effects upon the eye (Hale-Horner's syndrome), sweating ceases in the ipsilateral side of the face and scalp, but no effect is grossly detectable upon the circulation of the skin of the face. Now, if such a patient is told embarrassing things, is exposed to a hot environment, or is made to exercise, the denervated side remains unchanged in color; the opposite side becomes red as with blushing. A sharp sagittal line of demarcation is obvious from forehead to chin. We are inclined to believe that the blushing is due to activation of vasodilator fibers in the cervical sympathetic. The lack of blushing on the denervated side would be due to the interruption of such fibers. Certainly, blushing is not due to inhibition or cessation of vasoconstrictor tone, for we do not see it early or late after sympathetic denervation of the face. There remains the possibility that the unilateral or normal blush is in fact not due to activation of vasodilator sympathetic fibers in the cervical sympathetic, but possibly to a by-product of sweat gland activity with the liberation of a local hormone (bradykinin) which has a dilatory effect upon the local vessels. The denervated side does not sweat; hence this hormone is not locally produced and vasodilation, or blushing, does not occur on that side. Further tests are needed to settle this point.

Epilogue

The contributions of surgical research to human physiology are manifest. For illustration I have drawn from only a few fields in which surgeons have made essential contributions. There are others. Indeed, one now would have difficulty identifying an area of human physiology to which surgery has not made important contributions. Some have been made in the operating room, such as observations upon the localization of function in the cerebral cortex; others have been made in the laboratory, such as observations on pulmonary function and acid-base balance, clarification of the endocrine and metabolic response to trauma; still others have been made at the bedside or in the clinic as observations on physiologic alterations after surgical procedures. None should be as qualified to make these subse-

quent observations as is the surgeon who performed the operative procedure.

One may wonder how it has come about that surgeons may make significant contributions to human physiology. First of all, the surgeon is the sort of person who is especially likely to need proof before he accepts statements. He is apt to dislike authority and does not regiment well. He is likely to have tenacity of purpose and to go to extremes in search of knowledge. Beaumont studied Alexis in four periods between May 1825 and November 1833. Between times, Alexis, a *voyageur* at heart, would disappear, and Beaumont would seek him out, practically bribe him to return to him from distances of one or two thousand miles and even hired him into his household. Unless available evidence on a question is quite clear, the surgeon is of such mind that he must find out for himself, and he must do so quickly, sometimes too quickly. He has little patience for procrastination and for forgetting that a problem exists. I know few surgeons who are overly contemplative; I know many who are not sufficiently so; and I feel privileged to know some who possess a happy balance between action and contemplation. A second factor in the emergence of the biologic surgeon is that the countenance of surgery has changed from one of bravado and swashbuckling* activity to that of an applied arm of the biologic sciences. This change was ushered in by the Hunters in England. In America, Philip Syng Physick, a resident pupil of John Hunter's at St. George's Hospital, might have planted the Hunterian seed, but the time was not right. He must have become seriously discouraged, for in 1815 he resigned from the chair of surgery and became professor of anatomy.[8] John Collins Warren saw that the time for the new approach to surgery had come by the end of the nineteenth century,[8,9] and Halsted at the Johns Hopkins became its champion just before the turn of the century. Rhode Island may properly take a certain amount of credit for this, because early in his career Halsted could not have been considered an exponent of the biologic sciences in surgery. He was a very successful energetic surgeon of the "old school." But then, during parts of 1886 and 1887, he became a patient at Butler Hospital, in Providence, Rhode Island. Whether or not he was cured of the cocaine habit is still disputed, but none doubts that Halsted was a different person after this experience. He became thoughtful, introspective, meticulous, and precise. His important contributions to surgery came after this time.

Thus thought and reflection were added to the vigorous technical activities of the surgeon. Indeed, a broad background in general medicine has become an important part of the surgeon's education. Some had seen the need for this very early. In his Hunterian Oration for the year 1819, John Abernethy[2] wrote: "Medicine is one and indivisible; it must be learned as a whole, for no part can be understood, if studied separately. The physician must understand surgery, and the surgeon the medical treatment of disease. Indeed, it is from the evidence afforded by external disease, that we are enabled to judge the nature and progress of those that are internal; which appeared so clearly to Boerhaave, that, though his object was to teach his pupils the practice of medicine, he began by teaching them surgery." This same great surgeon (1815), although he lived in the anatomic era of surgery, preceding the pathologic era, wrote this of physiology:[1] "No study can surely be so interesting as Physiology. Whilst other sciences carry us abroad in search of objects in this we are engaged at home, and on concerns highly important to us; in enquiring into the means by which we live, and move, and have our being. To those, however, engaged in the practice of medicine, the study of Physiology is indispensable; for it is evident that the nature of the disordered actions of parts or organs can never be understood, nor judiciously counteracted, unless the nature of their healthy actions be previously known."

Finally, the introduction by Halsted of a system of graduate surgical education in this country is probably the most important development which has made the biologic sciences so much a part of surgery. This system has brought about certain inevitable changes in hospital staffing. For example, our surgical outpatient clinics are no longer overly populated by surgeons in the process of acquiring surgical judgment and awaiting an opportunity for a service on the wards in order to acquire more judgment and technical facility. For hospital administrators and for chiefs of services, this may be a disadvantage. It is outweighed, however, by the development of young surgeons who have been given the opportunity to reflect upon their daily clinical problems, to raise questions about them, and to take time for subjecting the questions to critical scientific study. From this new appreciation of clinical surgery have come today's remarkable advances in cardiac surgery, in the understanding and proper management of trauma, the rational basis for the treatment of conditions in which there has been a radical disturbance in the disposition of water, electrolytes, and other elements of the "mileu intérieur," and the understanding and evaluation of problems of ventilation in anesthesia, surgery within the thorax, and surgery among the elderly. Young men and women with this heritage as background and with an unlimited future before them

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*A swashbuckler is defined in Webster's dictionary as a "blustering daredevil."

will continue to contribute to physiology, biochemistry, immunochemistry, and even to the problems of genetics. Activities such as these will some day render commonplace the transplantation of tissues and organs.

Bibliography

[1]Abernethy, J.: Introductory Lectures. Longman, Hurst, Rees, Orme, and Brown. Paternoster Row, London, 1815

[2]Abernethy, J.: Hunterian Oration for the Year 1819. Longman, Hurst, and Co., London, 1819

[3]Beaumont, W.: Experiments and Observations on the Gastric Juice and the Physiology of Digestion. F. P. Allen, Printer, 1838. Republished with biographic essay by William Osler, Dover Publications, Inc., New York, 1959

[4]Bigelow, W. G.; Lindsay, W. K.; Harrison, R. C; Gordon, R. A.; and Greenwood, W. F.: Oxygen Transport and Utilization in Dogs at Low Body Temperatures, Amer. J. Physiol. 160:125-137, 1950

[5]Bigelow, W. G.; Lindsay, W. K.; and Greenwood, W. F.: Hypothermia: Its Possible Role in Cardiac Surgery: An investigation of factors governing survival in dogs at low body temperatures, Ann. Surg. 132:849-866, 1950

[6]Boyd, J. D.: Intermediate Sympathetic Ganglia. Brit. Med. Bull. 13:207-212, 1957

[7]Churchill, E. D.: To Work in the Vineyard of Surgery. Harvard University Press, Cambridge, Massachusetts, 1958

[8]Churchill, E. D.: Origins of American Surgery, J. Amer. Med. Assoc. 172:219-222, 1960

[9]Clowes, G. H. A., Jr.: Extracorporeal Maintenance of Circulation and Respiration, Physiol. Rev. 40:826-919, 1960

[10]DeBakey, M. E., and Simeone, F. A.: Battle Injuries of the Arteries in World War II. An analysis of 2,471 cases, Ann. Surg. 123-534-579, 1946

[11]Dragstedt, L. R.; Ragins, H.; Dragstedt, L. R., II; and Evans, S. O., Jr.: Stress and Duodenal Ulcer, Ann. Surg. 144:450-463, 1956

[12]Dragstedt, L. R., II; Johnson, A. N., Jr.; Singer, E. R.; and Oberhelman, H. A., Jr.: The Effect of Vagotomy on the Intestinal Phase of Gastric Secretion, Surgical Forum XI: 336-338, 1960

[13]Dripps, R. D.: (Editor) The Physiology of Induced Hypothermia. National Academy of Sciences, National Research Council, Washington, D. C., 1956

[14]Duval, M. D., Jr., and Price, W. E.: The Mechanism of Antral Regulation of Gastric Secretion. Continuous Cross-circulation, Ann. Surg. 152:410-415, 1960

[15]Gibbon, J. H., Jr.; Albritten, F. F., Jr.; Stayman, J. W. Jr.; and Mudd, J. M.: A Clinical Study of Respiratory Exchange During Prolonged Operations With an Open Thorax, Ann. Surg. 132:611-625, 1950

[16]Gloyne, S. R.: John Hunter, E. and S. Livingstone, Ltd. Edinburgh, 1950

[17]Harrison, R. C.; Lakey, W. H.; and Hyde, H. A.: The Production of an Acid Inhibitor by the Gastric Antrum, Ann. Surg. 144:441-449, 1956

[18]Hubbard, G. G.: Quoted by Dr. J. R. Baily, 1900, (cf. Osler, W. An address before the St. Louis Medical Society, October 4, 1902)

[19]Hunter, J.: Lectures on the Principles of Surgery. With Notes by James F. Palmer, Haswell, Barrington, and Haswell, Philadelphia, 1841

[20]Johnson, A. N., Jr.; Dragstedt, L. R., II; Singer, E. R.; and Oberhelman, H. A., Jr.: I. Studies on the Relationship of Antral and Fundic Denervation to Gastric Secretion, Surgical Forum XI: 334-336, 1960

[21]Lewis, T., and Pickering, G. W.: Vasodilatation in the Limbs in Response to Warming the Body; with Evidence for Sympathetic Vasodilator Nerves in Man, Heart 16:33-51, 1931

[22]Menguy, R.: Studies on the Role of Pancreatic and Biliary Secretions in the Mechanism of Gastric Inhibition by Fat, Surgery 48:195-200, 1960

[23]Moore, F. D.; Bodily Changes in Surgical Convalescence, Ann. Surg. 137:289-315, 1953

[24]Murphy, R. T.; Goodsitt, E.; Morales, Hector; and Bilton, J. L.: Peptic Ulceration with Associated Endocrine Tumors. Collective Review and Report of a Case, Amer. J. Surg. 100:764-779, 1960

[25]Murray, J. G., and Thompson, J. W.: Collateral Sprouting in Response to Injury of the Autonomic Nervous System, and its Consequences, Brit. Med. Bull. 13:213-219, 1957

[26]Randall, H. T.: Water and Electrolyte Balance in Surgery, Surg. Clin. North Amer. April, 1952, 445-469

[27]Sarnoff, S. J., and Simeone, F. A.: Vasodilator Fibers in the Human Skin, J. Clin. Investig. 26:453-459, 1947

[28]Simeone, F. A., and Felder, D. A.: Supersensitivity of Denervated Digital Blood Vessels in Man, Surgery, 30:218-226, 1951

[29]Simeone, F. A.; Grillo, H. C.; and Rundle, F.: On the Question of Ligation of the Concomitant Vein When a Major Artery is Interrupted, Surgery 29:932-951, 1951

[30]Simeone, F. A., and Husni, E. A.: The Hyperemia of Reconstructive Arterial Surgery, Ann. Surg. 150-575-585, 1959

[31]Strandness, D. E., Jr.: Personal communication, 1960

[32]Strandness, D. E., Jr.; Nothstein, D. L.; Alexander, J. A.; and Bell, J. W.: Observations on Arteriolar Disease in Arteriosclerosis Obliterans, Surgery 47:953-958, 1960

[33]Swan, H.; Virtue, R. W.; Blount, S. G., Jr.; and Kircher, L. T., Jr.: Hypothermia in Surgery, Analysis of 100 Clinical Cases, Ann. Surg. 142:382-400, 1955

[34]Tracy, G. D., and Simeone, F. A.: Studies of Sympathetic Denervation of the Forepaws in Unanesthetized Dogs. Surgery 43:125-133, 1958

[35]Wangensteen, O. H.: Segmental Gastric Resection for Peptic Ulcer. Method Permitting Restoration of Anatomic Continuity, J. Amer. Med. Assoc. 149:18-23, 1952

[36]Wangensteen, O. H.: Discussion of Paper by Harrison, *et. al.* (1956)

[37]Zollinger, R. M., and Ellison, E. H.: Primary Peptic Ulcerations of Jejunum Associated With Islet Cell Tumors of Pancreas, Ann. Surg. 142:709-728, 1955

CHAPIN FELLOWSHIP

The Superintendent of the Charles V. Chapin Hospital in Providence has announced that a Chapin Fellowship for the study of contagious diseases is available. The Fellowship provides a monthly stipend and the hospital will furnish living accommodations and necessary equipment. Additional information, and an application blank, may be obtained by corresponding with the Superintendent at the hospital.

PSYCHIC ENERGIZERS IN THE DEPRESSED PATIENT*

LAURENCE A. SENSEMAN, M.D.

The Author. *Laurence A. Senseman, M.D., of Lincoln, Rhode Island. Chief, Neuropsychiatry, Memorial Hospital, Pawtucket; Medical Director, Fuller Memorial Sanitarium, South Attleboro, Massachusetts.*

PSYCHIC ENERGIZERS are now very popular. The group known as mono-oxidase inhibitors are perhaps the best known. They are serving a useful purpose in depressed patients. Each day the mail is filled with attractive and expensive brochures extolling the virtues of this or that new drug and minimizing the side reactions. Needless to say, much work has been done on these drugs long before they reach the detail man for general distribution. The trade names of these drugs are hard to keep up with, and their chemical names even much more difficult (Table I).

Psychiatry today is being oversimplified, it would seem to me, by drug companies eager to sell their products. For instance, there were twenty full page advertisements in one recent issue of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. This would indicate the importance of these new drugs in the treatment of the mentally ill. There can be no doubt that the psychic energizers have a place in the treatment of the depressed patient, but we must keep in mind that there are dangers involved. The depressed patient is potentially suicidal, and it is therefore the doctor's responsibility to recognize this possibility and to direct the patient to the best source of help immediately and with safety. Depressions are very common and are frequently overlooked, but they can be serious and of potentially long duration if not recognized and treated.

Present-day living requires each of us to make adjustments to stress inherent in our environment. Fortunately, most of us can adjust to stress, or experience at most transient periods of anxiety, which can be eliminated by appropriate methods of adjustment. When the stress becomes overwhelming, or our ability to adjust to it is limited in the face of loss or major change, then our psychological reaction, if temporary or prolonged, can be a depression.

There are several kinds of depressive reactions: Exogenous, Reactive, or Psychoneurotic Depression due to environmental situations or problems; and Endogenous, Psychotic Depression due to internal stress, organic or emotional. A third type may not appear like a depression at all, and would then be described as a Depressive Equivalent.

The Exogenous Depression can be, and frequently is, disguised by many and varied physical complaints. Besides the classical signs of depressed mood, sadness, and increasing loss of interest and activities, the patient may describe in detail annoying symptoms, blaming one or another part of his anatomy. This is not deliberate deception on the part of the patient, as it is most likely unconsciously motivated; it never reaches a delusional state. The condition is most likely to occur in the adult, more frequently in the female, in mid-life, and especially about the menopause. The psychosomatic complaints are many and varied, most frequently manifested as gastrointestinal or as distressing nervous symptoms such as headache, dizziness, unsteadiness, poor concentration, and sleep disturbances. Usually these symptoms are attributed to some recent illness, the most popular at this time being the "virus." This culprit is blamed for almost any complaint of unknown origin. Frequently environmental situations, such as loss or change, can be found by the physician if searched for, evaluated, and possibly altered to the patient's benefit.

The Endogenous Depression is frequently called

continued on next page

TABLE I

Brand Name	(Generic Name)	Manufacturer
Benzedrine	(amphetamine)	SKF Lab.
Catron	(pheniprazine)	Lakeside
Deaner	(deanol)	Riker
Deprol	(benactyzine-meprobamate comb.)	Wallace
Dexedrine	(dextro-amphetamine)	SKF Lab.
Equanil	(meprobamate)	Wyeth
Librium	(methaminodizepoxide)	Roche
Marplan	(isocarboxazid)	Roche
Marsilid	(iproniazid)	Roche
Meratran	(pipradrol)	Merrell
Miltown	(meprobamate)	Wallace
Nardil	(phenelzine)	Warner-Chilcott
Niamid	(nialamide)	Pfizer
Phobex	(benactyzine)	Lloyd, Dabney
Ritalin	(methylphenidate)	Ciba
Suavitil	(benactyzine)	Merck S & D
Tofranil	(imipramine)	Geigy
Monase	(etryptamine acetate)	Upjohn

*Presented at the Annual John F. Kenney Clinic, Pawtucket Memorial Hospital, November 2, 1960.

Psychotic Depression, because the intensity of the depression is more extensive, and because the factors involved are not based on realistic happenings, but rather on intra-psychic factors for which the patient is the only witness. This type of depression is most frequently due to internal stress and strain; it is frequently precipitated without apparent cause and may be cyclic in nature. It is this group of patients that is more prone to suicide attempts. The manic-depressive and involutional depression belongs in this group. The cause is rarely completely understood by the patient or physician, and may have its roots in the patient's hereditary background as well as conscious or unconscious environmental stresses. These patients can become profoundly depressed in a short period of time, and energetic measures should be instituted at once to prevent self-destruction or other self-inflicted injury.

This illness affects, on the average, an older group and men and women about equally. The patient is slowed up in his thinking and acting. His facies registers his emotional blunting, tears are impossible, and sleep becomes impossible without sedatives. The emotional tone is one of hopelessness and despair. Somatic delusions are frequent and severe. Psychotherapy becomes difficult if not impossible at this point. Electro-convulsive therapy is the treatment of choice. Patients usually respond quickly and are out of danger after a few treatments; this will facilitate psychotherapy.

The third type of depression, Depressive Equivalent Reaction, may not even resemble a depression clinically. In this situation, the patient translates the depression into somatic ills that are markedly exaggerated and can involve any part of the body in any symptom configuration. It may be a chronic upper respiratory complaint, a cardiac neurosis, a cancer phobia, or syphilophobia. These reactions, however, in common with the other two types of depression involve the patient's difficulty in resolving changes or loss. These patients can be most effectively helped by searching for or attempting to determine the issues of change and loss. A case will illustrate this type of depressed reaction.

Case Report

F.D. Age 65. Chief Complaint: Burning in rectum, "bowels go dead raw after a bowel movement. I can't bear it, I moan and walk the floor because of this pain." Patient had a barium enema, gall bladder series, and sigmoidoscopy. She had been seen by a rectal specialist in Boston who injected her hemorrhoids. Tranquilizers and cathartics had been tried to no avail. She was pleasant and co-operative and well oriented, but was complaining bitterly of the rectal symptoms. When asked if there was any recent trouble in her family she stated that her sister had just died, after one year's illness, of cancer of the breast. She stated: "This year the cancer was about the bowel. I have been very upset as I was like a mother to her. I saw her every day and the abdomen drained pus. I have been sick since April, and every time I saw her I got worse with burning in the rectum." There had been no previous trouble of this nature. She and her husband were well adjusted except that he had "hardening of the arteries," causing her some concern. While this patient did not appear outwardly depressed, the close association and identification with her sister produced the somatization of her depressed feelings. She did not recognize this relationship until three electric convulsive treatments were given along with a psychic energizer. She has had no more somatic complaints regarding the bowel, and she has made a good recovery.

Discussion

There is a place for the anti-depression drugs or psychic energizers in all of these types of depression. Experience, enthusiasm, confidence, and knowledge of these drugs aid in their proper use and avoidance of side reactions. There are fortunately a minimum of complications with the psychic energizers, and they are usually not serious in my experience.

The first group, Exogenous Depression, may be handled best by insight therapy, environmental manipulation with psychic energizers as an aid to mood elevation. The selection of the best-suited drug depends on the age of the patient (the older age group does not respond well), the depth of the depression, and other factors. The amphetamines are still useful (although not as popular as formerly) in the younger group of depressed patients. It has been my practice to use one of the psychic energizers for at least ten days before changing to another drug when the patient is not showing improvement. It has lately been proven unwise to give two or more of these drugs concurrently as side reactions and complications are likely to occur.

In Endogenous Depression these drugs are used in conjunction with electroshock therapy and psychotherapy and are especially useful in the recovering patient after active therapy has been discontinued.

In recent years, a new laboratory test has proven helpful in determining the type of depression, as well as in giving some idea as to its depth and prognosis. Known as the Autonomic Nervous System Reaction Test, or Funkenstein Test, it is simple, consisting of two injections, Adrenalin® and Mecholyl® given intravenously.

The blood pressure is taken each minute for 10-15 minutes, and the results are recorded on a graph as shown in Figure 1:

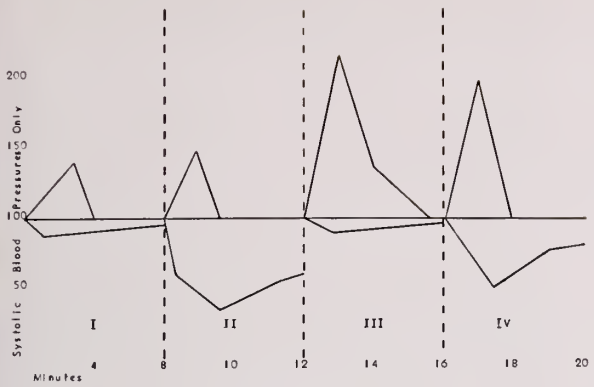


FIGURE 1

I. Minimal response to adrenalin and mecholyl. Patient is not anxious or depressed.

II. Minimal response to adrenalin, maximum response to mecholyl. This patient is depressed.

III. Maximum response to adrenalin, minimum response to mecholyl. This patient is anxious rather than depressed.

IV. Maximum response to adrenalin and maximum response to mecholyl. This patient is both anxious and depressed, probably a psychoneurotic depression.

The adrenalin raises the blood pressure, which is recorded on a graph at one-minute intervals. The mecholyl lowers the blood pressure in a similar fashion. The depressed patient gives a characteristic curve with each of these injections along with symptoms of dryness, perspiration, crying, fear, and palpitation.

In order to test the new psychic energizers, the Winston Blood Pressure Follower has been developed in England and is now being used in evaluating drug responses. This unique machine for electronic recording of blood pressure in the finger is proving useful in the further study of the depressed patient and his reaction to certain drugs affecting the autonomic nervous system.

ANNUAL GOLF TOURNAMENT

and

DINNER

Wednesday, June 14, 1961

Providence Medical Association

MEDICINE IN AFRICA

A correspondent of ours, working temporarily as visiting surgeon in Ghana, recently described some of his experiences in a letter. We feel that these timely observations will be of interest to our readers:

"My hospital is huge (four big five story buildings, and several smaller auxiliary buildings and pavilions), and is a fine example of modern architecture, with modern costly equipment and medieval medicine. Air-conditioned operating theaters are a travesty on aseptic conditions, with surgical treatment standing only one grade above 'voodoo' medicine. This is a place of contrasts. Our anaesthetist performs intubation very nicely and uses modern equipment, but doesn't take the blood pressure and ignores the pulse, respiration, and general condition of the patient.

"My ward nurses are doing all intravenouses alone without help, but don't mind putting a finger into a bottle with sterile solution. Gastric suction tubes are sterilized before use, but not bedpans of typhoid patients after use. Dissecting scissors are used for cutting plaster of Paris, and not one Steinman pin has a sharp point. The nurse wears a mask for changing dressings but puts her hands into every infected wound. The brushes for scrubbing are not sterilized before use, and the 'sterile' drape sheet covering the patient is full of holes. But everything is made from nice modern green linen.

"The greatest oddity, which I discovered only by chance, is a 'dressing unit' which goes from patient to patient every day and changes dressings — and also removes drains without bothering to check with the surgeon.

"My colleagues are a mixed lot of Hindu, Pakistani, some Lebanese, and a few Italian doctors. Here and there there are Ghanian doctors too; administrators and senior medical officers are all Ghanians, and good ones too. My chief assistant is an Italian who sings nicely, but as a surgeon is no great help, at least for the moment. But it is pleasant to have someone with whom to practice my Italian.

"When I see how much is to be done, I sometimes doubt if it can be done at all. In the meantime I have performed fifty-four operations (in a matter of a very brief period), most of them major ones under most difficult conditions. But I have made friends with the nursing staff and the doctors, and that is of great help. I forgot to mention that I have a mere 160 surgical beds under my charge!"

ISRAEL DIARY

SEEBERT J. GOLDOWSKY, M.D.

The Author. *Seebert J. Goldowsky, M.D., of Providence, Rhode Island, Chief of Surgery, Miriam Hospital; Director, Peripheral Vascular Clinic, Rhode Island Hospital; Editor-in-Chief, Rhode Island Medical Journal.*

IN DECEMBER, 1959, and January, 1960, the writer, together with Doctors Irving A. Beck and A. A. Savastano, visited the state of Israel in a hospital to hospital medical exchange program between Miriam Hospital in Providence, Rhode Island, and Poriah Government Hospital in Tiberias, Israel, sponsored by the nonprofit, nonsectarian Unitarian Service Committee. The exchange was limited to the specialties of general surgery, internal medicine and orthopedics. Doctor Alex M. Burgess, a member of the Medical Advisory Committee of the U.S.C., was sent to Israel by Miriam Hospital to participate in the program. During the past year Doctors Roman R. Pe'er, Eldad Askireli, and Chaim Goldman have since been in the United States, spending one month each in Miriam Hospital, and additional time visiting other medical centers. We were all greatly impressed by the tremendous building activity in the country, by the spirit and charm of the people, and particularly of our hosts, and by the competence of the physicians and the high quality of medical care. The following are excerpts from the writer's personal diary of the trip.

* * *

Friday, December 18, 1959. Left home at 9:00 A.M. Arrived at Idlewild 11:15 A.M. Checked in T.W.A. Had sumptuous lunch and cocktails at Golden Door in magnificent arrival building of international airport.

Plane took off one hour late in rain at 6:00 P.M. Delay due to heavy GI mail load and heavy traffic. Made up time rapidly with 120 mph tail wind. At 7:40 P.M. Captain told us it was 1:40 A.M. Paris time, and it would not be long before dawn would break (at 19,000 feet!). Tourist Class not bad, except for limited leg space. Food decent—somewhat gemütlich. It is now 2:30 A.M. Paris time! and everyone is wide awake. How much sleep will we get?

Sunday, 2:00 A.M., *December 20.* Arrived in Paris about one-half hour ahead of schedule despite late start due to 140 mph jet-stream tail winds, around 10 A.M. Spent some 60 minutes in Transit Area (sort of under seal) where the usual tourist trap things are for sale, including magnums of Courvoisier. Bought copy of Paris edition of HERALD TRIBUNE, which had headlines about Eisenhower arriving in Paris today.

Crossed Alps and saw Mt. Blanc (3,500 feet below our 19,000 ft. cruising altitude) and the Matterhorn. All snow-covered—magnificent scenery. Tried to get photos from the plane, but may be too much whiteness. (They came out all right.) Also spent time at Rome and Athens airports, a good deal like seeing Europe from subway. All have same tourist sucker bait. No European airports have activity comparable to that in any large American city. We are told Europeans still not air conscious. Our Super-Connie G (Super Constellation), about one year old, is already obsolescent. Saw several large jets and they are magnificent sight. Arrived Tel Aviv (Lydda Airport) 11:30 P.M. Met by Dr. Chaim Goldman (orthopod) and his lovely wife at the airport. Attempt made to expedite our passage through customs and immigration, but this didn't seem to save much time. Spending night at Yarden (Hebrew for Jordan) Hotel in Tel Aviv. Had orange juice before retiring —others with vodka added, but not me (OJ is bottled). Never heard of screw driver here. Room clean, but a little odd. Shower in center of bathroom with duck-board, but no stall. Toilet communal. And so to bed.

Sunday, December 20, 11:00 P.M. Slept well last night. Woke up spontaneously at 6:45 A.M. and turned off alarm. All went to dining room together for breakfast about 9:00 A.M. Had OJ, coffee, bread, butter, cheeses, and marmalade. Also had tomato and black olives—unusual for breakfast. Meir (first name only is known to us), our driver from Health Ministry, appeared at 9:30 on time. Drives Ford station wagon donated by Hadassah of Canada. After stowing bags in station wagon, we started on trip to Tiberias. Got first daylight view of Mediterranean at Tel Aviv—surf heavy and gray, in beginning rain. Began to rain in

earnest and lasted most of day. Tel Aviv is impressive city of concrete, brick, and stucco. Has look of many tropical and semitropical cities with overtones of Florida. City is very cosmopolitan and really jumping. Considerable traffic. Trip to Tiberias took about two hours. Passed several Kibbutzim (communal farms) and much valuable farm land—mostly irrigated—women working in fields. Little Arab donkeys (probably forebears of our Mexican burros) common. Many black goats grazing on rocky hillsides. Desert hills with rocky outcroppings and sparse vegetation, including cactus, reminiscent of Arizona. Arab villages interesting — some of their huts look like adobes further enhancing the illusion. Passed 4 Arab boys selling bouquets of tiny fragrant flowers. They want ½ Israeli £ (25 cents) for 4 bouquets. It was a sight to see Meir bargain with them. Ended by paying 3 shillings (about 7½¢ U.S.) and they shouted curses at us to fulfill the illusion. Passed through the lush Jezreel Valley which is the granary of Israel. Looked like our western plains with mountains in distance. Arrived Tiberias at 1:30 P.M. During descent to town passed sea-level marker. Town is over 600 feet below sea level. Reservations at Chen Hotel, a small neat pension. Beautiful roses in room from staff of hospital. Have nice room, but shower again is in middle of bathroom—no protection for privy from spray. Had lunch of a baked pudding of meat and eggplant, soup, and mutton. Ended up with tea served in glasses. Then taken to Poriah Hospital on beautiful hilltop. Hospital of pavilion or cottage type—prefabricated in Finland for Russian Army and bought as surplus. It is now about 4 years' old and still being added to. Not sumptuous but neat and adequate, surrounded by pretty flowers and shrubs. Addressed informally by Dr. Avram Friedman, pediatrician and superintendent. Told of setup of government hospitals and Kupath Cholim (Workers' Sick Fund). Has services in medicine, surgery, orthopedics, pediatrics, eye, gynecology and obstetrics, X rays, and pathology. Standard service consists of chief, resident, assistant resident, and intern, all full-time. Intern in last year of 7-year course of medical training—follows 6 years of high school, equivalent to 2 years of college. Then had delightful tea at hospital with Drs. Friedman, Eldad Askireli (medicine), Roman Pe'er (surgery and my opposite number), and Ben Mosche (eye), also Dr. Alex M. Burgess (who had preceded us there), and all our wives. Then returned to our hotel and informed our proprietress that we could eat no more food, which disappointed her as we were expected for supper. Spent evening walking the streets,—charming town. A pretty park nearby with Bougainvilleas and other exotic vegetation. Kids playing in park in semi-darkness. Could see new town on hillside and was a fairyland of lights. Ran into Alex and Abby Burgess, he in jaunty beret. Now 12 midnight and to bed. Will start participating in professional activities in earnest tomorrow.

Monday, December 21, midnight. Took off with Pe'er at 8:30 A.M. for Poriah Hospital. Spent morning making surgical rounds. Operating days are Tuesdays, Thursdays, and Sundays. Discussed at length many problems. Pe'er described frustrations of practicing surgery in Israel and especially at Poriah. Government surgeons can do private practice in larger cities in private hospitals, but there is none in Tiberias. Thought I would duck varicose veins, but they were very much interested in my views—and my first case tomorrow will be a stripping! Pe'er is charming fellow and most anxious to show me around, sightseeing as well as medically. Met Mesdames Friedman, Pe'er, Askireli, Benmosche, and Goldman. All exceedingly charming and pretty, and some even beautiful. After relaxing briefly went to Tiberias' one night club, The "Minus 206," referring to meters below sea level, a new club with intimate atmosphere with fisherman's motif. Left about 11:15 P.M.—but instead of going to bed, took a ride along lake to investigate some military searchlights and flares—probably have to do with protecting Israeli fishing in lake from Syrians. Arrived at the hotel about 11:40 and so to bed.

Tuesday - Wednesday, 12:30 A.M., *December 22-23.* Started day leaving Hotel Chen with Pe'er at 8:00 A.M. Passed up hors d'oeuvres for breakfast, but did take a soft boiled egg. Was raining when we left hotel. (This is the beginning of the rainy season.) Stopped to take picture of the valley. Scenery is really magnificent. Did bilateral vein stripping.

Met Dr. Simon Btesh (Director of Ministry of Health) at lunch—came up from Jerusalem to meet us. Had weekly conference at 2:00 P.M. After greetings from both sides, Dr. Burgess gave talk on O_2 administration and Irving Beck on Graves's disease from dexedrine for weight reduction. Expected to spend evening in hotel reading and resting—but it was not to be. Pe'er has made tentative arrangements for rooms at Galei Kinneret, better hotel, for after January 3. Perhaps will have toilet seat that stays up and bath—or shower not in middle of bathroom.

Wednesday, December 23 — 3:45 P.M. While waiting for Pe'er this A.M. took pictures of school diagonally across street from hotel. Kids lining up to enter school. When they saw me with camera, they begged to be in picture. So snapped 3 or 4 of groups of kids—excellent models. We could not speak, but there seemed to be complete understand-

continued on next page

ing. Left for hospital at 8:30 A.M. Made careful rounds, taking all morning. Later saw cases in OPD clinic. During noon hour took some pictures, including an interesting elderly Druse about to be discharged from hospital. Attended X-ray conference for a while, but left early because it was monopolized by medical service. Have seen a couple of echinococcus cyst cases, but not at surgery. They plan to have me do a thyroid in A.M. and assist Mirvis (Pe'er's assistant, and an Argentine) with a bilateral recurrent varicose veins. Another evening planned for us tonight by administrative superintendent of hospital—an oriental dinner in downtown Tiberias.

Thursday, December 24, 9:00 A.M. Last evening were taken for dinner to nice restaurant on lakefront in old Arab quarter—served good oriental food—houmuss, musht (a fish found only in Lake Tiberias and Lake Victoria), shashlick, and fresh whole fruit with Turkish coffee (which I didn't drink). Party was given by Dr. Btesh, and whole staff and wives were present, including nursing supervisor. Party broke up at 10:00 P.M. without speeches. Nice weather this A.M.—also lovely yesterday. Incidentally thyroid was canceled because Irving Beck felt gland was too soft and needed more iodine. Endemic goitrous area found in mountains of N.E. part of country.

Thursday, December 24, 4:30 P.M. Left hotel 10:30 A.M. for Nazareth in station wagon. Stopped and visited health center and clinic for northern area. Then visited the usual tourist spots in Nazareth, including Church of St. Joseph, the Church of the Annunciation and the Synagogue Church. Walked through the center of the old town and was frustrated no end, because I had used up film in camera. Want to get back there badly. Had dinner with whole crowd. Dinner at TB hospital (government) at top of hill overlooking Nazareth—has 60 patients, all Arab. Town all Arab except government administrators—population 25,000 and 50-50 Christian, according to our guide. Meal most sumptuous of many courses, including many Arab dishes which were delicious, but shall remain nameless, and main course of goose. Delicious rich chocolate cake with whipped cream for dessert (Btesh had two portions). All hands continue to knock themselves out to please us. On way back snapped pictures of the historic well at Cana (where according to tradition Jesus performed the miracle of the wine), and of the Horns of Hittim, where was fought the decisive battle of the Crusades in 1187—where the Moslems under Saladin defeated the Christians.

Friday, December 25, 5:30 P.M. Last night left hotel in caravan with all doctors and wives for Nazareth—party there arranged by local Rotary of which Friedman is a member. Parked in narrow street in old quarter and were taken to Y.M.C.A. upstairs in old Arab building. First sat around at tables and drank a sweet soda pop—later taken to Arab coffee room where we sat on old rugs and were served aromatic Turkish coffee by an ersatz but amiable Bedouin. Meantime an American style jazz band with a beatnick saxophone player played real cool. Left crowded fire trap, and then walked to gate of St. Joseph's Church to attend midnight Christmas Mass. Btesh had obtained 5 tickets to mass for about 20 people. Arab populace milling about gate and kept out by police, because they had no tickets—shouted unpleasant epithets. Meantime kids climbed over wall as at football game. Finally, they decided to let 5 of us in—by some prestidigitation ticket was passed out thru gate several times until all were in—crowd still milling about outside. Inside church Christmas Mass had started—bishop at mass for first time in many years. One by one we left church about 12:30 A.M. Judy Pe'er became ill from strong Arab odors in church. Music nevertheless beautiful.

Left Nazareth about 1:00 A.M. Rode back with Friedman—had flat tire in middle of desert. To bed at 2:30 A.M. and read till 3:00 A.M.

Up at 7:00 A.M. and left for hospital with Pe'er at 8:15 A.M. Routine nonoperative day. Left hospital 2:00 P.M.—pre-Sabbath. Pe'er took me to hotel through different route—saw Jordan fisheries, Jordan river and beautiful views of Lake. Also Byzantine baths and church, Roman baths at hot springs, and tomb of Rabbi Meir, as well as old ramparts built in 1740.

Mrs. Goldowsky spent P.M. attending Chanukah party at school where Naomi Goldman (Mrs. Chaim) teaches.

Saturday, December 26, 6:00 P.M. Arrived back short time ago from all day trip to Northern Galilee. Had 7-passenger touring car, 1954 DeSoto—formerly N.Y. City taxicab. Driver was Itzhaak (Isaac)—husky Sabra (native Israeli) who is former policeman, veteran of the War of Liberation, and part owner of the taxi company. Intelligent and speaks good English. Stopped first at Tabgha (from Heptapagon—7 springs). Here is Church of the Multiplication, where tradition has it Jesus fed multitudes on 5 loaves of bread and 2 fishes. Spoke German with bearded Benedictine monk—are caretakers of Byzantine mosaic floors of 4th century—must have been of great beauty—colors still preserved. Then to Capernaum (Latin corruption of Kefar Nahum) restored Graeco-Roman synagogue where Jesus reputedly preached (it was built after his death)—many stone artifacts preserved and remnants of the foundation of Peter's home who was a fisherman. Guide was an ascetic Italian Fran-

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Editorials

TRAGEDY STRIKES CLOSE AT HAND

Several recent air crashes have brought very close to us in New England the chilling reality of disaster. The closest geographically was the crash into Boston Harbor of the Eastern Airlines *Electra* near Logan International Airport in East Boston. Of more recent occurrence was the collision over neighboring New York of the United Air Lines D.C. 8 and the T.W.A. *Constellation*. Finally, and virtually yesterday was the loss near Brussels of the Sabena Boeing 707. This latest tragedy resulted in the annihilation of the American figure-skating team, several coaches, and members of the skaters' families; and despite its distant locale, the impact of the losses struck very close to home. Dudley Richards, American pairs champion, whose home town was Barrington, Rhode Island, had recently been a resident of Boston. Maribel Vinson Owen, herself American figure-skating champion nine times and her two lovely daughters, sixteen-year-old Laurence and Maribel, American and North American singles champion and American female pairs champion respectively, all of Winchester, Massachusetts, were lost in the holocaust, wiping out this vital family of mother and two daughters. Poignant as was the loss of the vibrant young people, the death of Mrs. Owen amounted virtually to the liquidation of a national resource. Tenley Albright, former Olympic champion, a fourth-year student at Harvard Medical School, and daughter of Boston Surgeon Doctor Hollis Albright, had also been a protégé of Mrs. Owen. The many other passengers aboard cannot go unmentioned.

We have purposely specified air lines and equipment to show that the most prestigious of carriers and the finest and most advanced planes have been involved. In the past year some 700 people have lost their lives in passenger plane accidents.

There is no question as to the conscientiousness of all concerned with air safety. A recent *CBS Reports* on the Boston *Electra* crash, a similar study some months ago in The New Yorker Magazine regarding an earlier American Airlines crash in New York, and press coverage in general have made this abundantly plain. Federal authorities, the carriers, the Air Lines Pilots Association, the builders of the planes, and the manufacturers of engines, equipment, and accessories are all deeply anxious to solve the problem. The care with which each mishap, large or small, is reconstructed down to the most minute detail is really a saga of thoroughness. Sooner or later the cause of every air accident, even in the total absence of survivors, is established beyond reasonable doubt. Changes in regulations and modification of equipment suggested by these investigations are likely to follow. Yet the accidents continue.

Even though air travel is undoubtedly one of the safest activities in which man engages, the apparent likelihood of total destruction when failure occurs gives such failure a peculiarly chilling aspect. As laymen in these extremely complex and technical matters, we cannot hope to offer substantially constructive suggestions. Yet as doctors we cannot stand aside in the face of such appalling loss of life. We suggest, perhaps timidly, that a new approach to the problem of air safety be sought. Without taking a horse and buggy posture, it may be seriously questioned whether further increases in the speed of commercial aircraft, with the resulting geometric multiplication of problems, can really be justified; and if it can, whether a limit must not eventually be established. May there not be a limit to the number of flights allowable in any given time and area? We further wonder whether, if electronic traffic control, three-dimensional radar, and enlarged and better airports are necessary, they should not be procured on a crash basis without regard to expense. Although budgetary matters cannot be ignored, we feel they have little substantial validity where human lives may be unnecessarily sacrificed. If techniques and equipment are still under investigation, money for the necessary research should be spent without hesitation. If new seating, seat belts, and other accessories are shown to be advisable, modifications should not await the obsolescence of present equipment. We feel that many of these measures are legitimate areas for federal spending when it may spare the air lines at times prohibitive costs. These are some of our thoughts in a problem about which we must not assume a fatalistic outlook.

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THE CHARLES VALUE CHAPIN FELLOWSHIP

THIS FELLOWSHIP, established in the will of the late Anna Augusta Chapin in memory of her distinguished husband, and offered for the first time in 1948, is again available for a suitable candidate. The funds are set aside in a trust vehicle with the following interesting provisions:

> "In Trust, as the *Charles V. Chapin Fellowship for Research in Contagious Diseases,* for the following purposes: To pay the net income periodically to such person as may be designated from time to time by the governing board of the Charles V. Chapin Hospital to carry on research work in the study of contagious diseases. This gift is made upon the express condition that the Charles V. Chapin Hospital at its own expense shall provide room, board, and suitable equipment at the hospital for the person so designated, and that the person so designated, upon accepting such appointment, shall devote his entire time, free from routine work at the hospital, to said research work. . . ."

During the past thirteen years the fellowship has been awarded seven times, three times to graduate students at Providence College, once each to graduate students at Brown, University of Rhode Island, and University of Connecticut, and once to a resident in pediatrics at Chapin Hospital. The range of subjects has been wide: on a complement fixation test, chick embryocultures in the rapid identification of mycobacterium tuberculosis, experimental grouping and typing of hemolytic streptococci, statistical study of a poliomyelitis epidemic, examination of Vi-antigen by a direct hemagglutination test, poliomyelitis statistics, measles encephalitis, and hemophilus influenzae meningitis.

Recipients of the fellowship need not be doctors of medicine but should generally be equipped to undertake investigation at the graduate level. This is an excellent and rewarding opportunity to perform a research study under comfortable and congenial auspices. We suggest that our readers call to the attention of likely candidates the availability of this generous fund. Application forms may be obtained from the administrative offices at Charles V. Chapin Hospital.

CERTIFIED MILK IN PROVIDENCE

CERTIFIED MILK had its origin in the medical profession. In 1893 Doctor Henry L. Coit, of Newark, New Jersey, formulated a plan by means of which he and his colleagues might obtain for infant feeding a supply of clean, safe, pure, nutritions milk, the best which the knowledge of the time could produce. In accordance with this plan the Medical Society of Essex County, New Jersey, appointed a Medical Milk Commission which entered into contract with a dairyman (Stephen Francisco of Caldwell, New Jersey) willing and able to produce this milk which was to be "certified" by the Commission and labeled with the copyrighted name "Certified Milk."

Other medical societies soon followed the example of the Essex County Medical Society, and by 1901 there were fifty-eight local Medical Milk Commissions functioning in different parts of the country, each formulating its own methods and standards but showing a remarkable similarity in fundamental requirements.

In 1907 most of these local commissions were organized into the American Association of Medical Milk Commissions, Inc., which had for its objects the adoption of uniform methods and standards for the production of Certi-Milk, and the extension of the movement throughout the country. Four standing committees were appointed: Medical Examination of Employees, Chemical Standards, Bacteriological Standards, and Veterinary Inspections and Protection Against Tuberculosis. These committees submitted reports which were adopted by the association and in 1909 were published in the form of a *Manual of the Working Methods and Standards for the Use of the Medical Milk Commission.*

In 1925, at a meeting of the Providence Medical Association held on November 2, a motion by Doctor Henry E. Utter was adopted that provided for the appointment by the president of a committee of three to take up the question of the duties and personnel of a Medical Milk Commission. A month later Doctor Albert Miller, then president, named the first Medical Milk Commission of the Association which consisted of the following physicians: William P. Buffum, chairman, William H. Jordan, Maurice Adelman, A. Roland Newsam, and Reuben C. Bates. Their duties were set forth to receive petitions to produce Certified Milk, to designate a sanitary inspector, a veterinarian to inspect the cows, a physician to examine the employees of the farm, and an analyst to make bacteria counts, and to check the chemical contents of elements of the milk.

The first report of this Milk Commission of the Association was published in the February, 1930, issue of the RHODE ISLAND MEDICAL JOURNAL, and it noted that the bacterial and chemical examinations were made in the laboratories of Brown University under the supervision of Pro-

fessor Frederick P. Gorham. During the subsequent thirty years the following farms have produced and sold Certified Milk under the supervision of the Commission of the local medical Association: Alta Crest Farm, Ferrycliffe Farm, Cocumscussoc Farm, Fairoaks Farm, and Brightridge Dairy.

Currently the following farms are selling Certified Milk in this state: Hampshire Hills, Hillside, and H. P. Hood & Sons. The members of the Medical Milk Commission for 1961 are: Doctors John T. Barrett, chairman, Bertram H. Buxton, Jr., Harold G. Calder, John E. Farley, John P. Grady, Maurice N. Kay, Henry E. Utter, and Reuben C. Bates, secretary-treasurer.

Since 1901 the *Methods and Standards* have been revised from year to year at the annual conventions of the American Association of Medical Milk Commissions in accordance with advancing scientific knowledge, and Certified Milk has retained a position of leadership in the dairy industry which has exerted an influence far greater than volume of its sales may indicate. It is the object of this Association to retain this leadership, and it is the belief of its members that regardless of what subsequent treatment may be given to milk, improvements of the product, as to safety and nutritional factors, can best be accomplished at the source of production. It is the belief of the Association that Certified Milk is the highest grade of milk obtainable. Recognition of the standing of the Association is to be found in the laws of many states and municipalities which require that Certified Milk shall be produced in accordance with the *Methods and Standards* as currently published by the American Association of Medical Milk Commissions (or words to that effect) and by a similar definition which occurs in the United States Public Service Milk Ordinance.

The Special Certified Milks are classified as follows:

1. *Certified Vitamin D Milk.* Vitamin D Certified Milk is defined as whole Certified Milk rendered antirachitic by the addition of a concentrate, and it shall be of sufficient vitamin D potency to show by biological assay a content of at least 400 U.S.P. units per quart. It is suggested that each Medical Milk Commission shall make or have made such tests as will insure the maintenance at all times of the potency required for Vitamin D Certified Milk produced under its certification, i.e., at least two biological assays per year, in December or January, and the other six months later. Producers of Vitamin D Certified Milk must keep complete records covering the production of this product on file at the farm, and with the Milk Commission. Any concentrate of Vitamin D used for the production of Vitamin D Certified Milk shall be a brand declared suitable for such purposes by local, state or municipal health agencies.

2. *Certified Milk-Homogenized.* Certified Milk-Homogenized may be produced and labeled with the approval of the Medical Milk Commission and the Committee on Methods and Standards of the American Association of Medical Milk Commissions. It also may be labeled "Certified Milk-homogenized, soft curd" provided it maintains a curd tension below 15 grams.

3. *Fat-free (Skim) Milk with Vitamins A and D* Added. Certified Fat-free (Skim) Milk with vitamins A and D added may be produced and labeled with the approval of the Medical Milk Commission and the Committee on Methods and Standards of the A.A.M.M.C. The vitamin D content of this milk shall conform with the specifications of Title 2, Sec. 5a (see preceding paragraph). The vitamin A content shall be stated on the label of the cap of each bottle, as agreed upon by the local Medical Milk Commissions. The vitamin concentrates used shall be a brand declared suitable for such purposes by local, state or municipal health agencies.

4. *Certified Low Sodium Milk.* A milk which is produced and handled in accordance with these *Methods and Standards* and treated so that its sodium content is reduced to less than 50 milligrams of sodium per quart.

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ISRAEL DIARY

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ciscan—asked us to pray for him! Passed Mt. of the Beatitudes where Jesus preached the Sermon on the Mount.

Visited partially excavated site of Hatsor (Biblical Hazor)—present 19 centuries before Christ and present when Israelis conquered country 13th century B.C. Took first pictures of Mt. Hermon—snow-capped and some 10,000 feet high—well inside Syria. Whole trip was along Jordan-Hula Valley, and Syrian border was always in view to the east of the valley. Lake Hula, smallest of 3 seas of Jordan rift now drained by impressive engineering feat—river passes thru valley as 2 drainage canals—land now rich agricultural area with fish ponds where fish are propagated and farmed like poultry. Visited Metulla, most northerly village in Israel—surrounded on 3 sides by Lebanese border—saw border marker on road running into the Lebanon—across border could see Arabs tilling soil with oxen—contrast striking. Then made ascent into Safad (medieval Hebrew city)—a road of tremendous scenery to top of Mt. Canaan just about 3,000 feet above sea level. Itzhaak explained to us the strategy of the battle for Safad and the miracle of the retreat of the Arabs from the citadel—terrified because of onset of rain during bombing—thought it was atom bomb.

Sunday, December 27, 11:30 P.M. (Saturday is Sabbath, Sunday a workday). Relatively quiet day. Pe'er delayed a little this A.M.—left for hospital at 8:30. Went straight to operating room. Helped Pe'er do routine good-sized umbilical hernia—did good Mayo repair—seems to be a very common finding hereabouts. Later explored interesting duodenal obstruction—proved to be carcinoma of pancreas with widespread metastasis and local extension. Saw in consultation pretty little 10-year-old girl with hypertrophy of one leg due to arteriovenous communication—diffuse hemangioma, surface heat, and dilated veins. Will accept on surgical service for study. Real surf on Lake (Sea of Galilee)—amazing when one considers it is only 5 miles wide—but very strong wind.

Went to concert in evening. Very pretty young girl—played well with considerable technical proficiency, but little subtlety of shading—also piano out of tune for which artist apologized—also we sat too near piano. Program printed in Hebrew, but conventional—César Franck, Ravel, Chopin, and a local composer.

Monday, December 28, 10:30 P.M. Left for hospital with Pe'er at 8:00 A.M. In operating room explored oriental type Jewish lady for ulcer of duodenum—found ulcer healed, but took out gall bladder for stones and repaired umbilical hernia. Umbilical hernia in females exceedingly common hereabout. Will probably do femoral arteriogram on little girl previously mentioned. Weather beautiful today. Sun and shadow effects on hills produce infinite color variations reminiscent of Grand Canyon.

This evening went to charming little art gallery with group.

Tuesday, December 29, 7:00 P.M. Day in hospital rather routine, and somewhat on dull side—much motion, but not much accomplished. Had case of cardiac arrest in GYN laparotomy—Mirvis in next room doing circumcision was called—opened chest and did massage with restoration of function, after 2 or 3 compressions—patient viable, although outcome including cerebral status not determined—everyone very proud of Mirvis—his stock went up sensibly. Many circumcisions done on Jewish boys—with consent of Rabbinate—not done behind Iron Curtain—very little phimosis—but done because of ribbing by schoolmates—and of course for health reasons. Gave lecture this P.M. on pre- and post-operative care—elementary, but gave them a general picture of our management—also the gospel on special surgical care units. Irving Beck spoke briefly on simplified management of diabetics. Sav. (Dr. A. A. Savastano) was to talk on cortisone ℞ of orthopedic conditions, but insufficient time.

Thursday, December 31, 8:20 P.M. Day at hospital yesterday routine—no surgery. Woman who had cardiac massage still comatose and having convulsions. Biopsy from man with duodenal obstruction was pancreatic carcinoma. At lunch at hospital met an estimable lady from Jerusalem who is a "social worker"—sort of "lady visitor"—Mrs. Epstein—spoke with a pure native Providence accent—born and brought up in Providence—lived on Olney Street—went to Hope High and got R.N. from MGH. Married dentist—has lived in Jerusalem past 41 years, with only one trip back to Providence, I think over 20 years ago! In afternoon I took ride to nearby kibbutz—took some impressive panoramic shots and pictures of kids—also greenery—brilliant under irrigation. Returned to hotel about 4:45 P.M.

8:30 P.M. About 6:00 P.M. went to Chanukah cocktail party given by mayor of Tiberias for U.N. officers. Mayor diminutive—looked like poor man's Ben Gurion. Met some fine looking New Zealand and Danish officers—and Israeli as well. Canadian Lt. Col. from Ottawa and Major from London, Ontario—both glad to hear stateside voices. U.N. doing very fine job, although it is not politically popular here to say so. At breakfast met 3 Texans—one a minister (D.D.) and another a lawyer, passing through on unstated business—have just been

to Jordan from one end to other—say crossing border like passing into new world 100 years more advanced.

Spent routine day in hospital. Roman showed me his method of doing pilonidal—technique he picked up in American literature, triangular excision and rotation of flaps—looks good. I did fairly satisfactory femoral arteriogram on little girl with a-v aneurysm—no shunt seen—will see dry films later. Cardiac massage patient decerebrate.

Local Hebrew press picked up story of cardiac massage—said it was first in Israel which is doubtful—and that 3 visiting U.S. doctors very much impressed!—Pe'er says he hopes they don't send someone around to interview patient.

Friday, January 1, 9:00 A.M. *(1960).* The new year has arrived at last in the land where began the Christian era! Called for by Pe'ers to be taken to St. Sylvester Day (New Year's Eve) party about 10:00 P.M. Lovely party. Galei Kinneret (the leading hotel) served us a delicious meal and then at midnight a sumptuous buffet with more foods than I could sample—ended with fruit compote and the doughnut-like cake which seems to be a local delicacy. Arrived home from party about 2:30 A.M.

10:00 A.M. P.S. Music last night provided by single pianist who doubled in piano-accordion—yet quite satisfactory for dancing—have danced more in past 10 days than past 10 years. After serving food, chef joined briefly in dancing, and cute waitress and kitchen boy did creditable rock and roll—then another (from Germany) played briefly but brilliantly on accordion, largely Russian tunes.

Have just returned from solitary stroll along promenade walk, scenery positively alluring with mirror-like lake far below and mountains in distance in sun and shade, topped by brilliant cloud effects, and palms and Bougainvillea in foreground, sparkling in sun and fresh from recent rain.

Saturday, January 2, 9:30 A.M. At tea time yesterday went to Goldmans for party celebrating last day of Chanukah. Kids put on entertainment of their own selection under tutelage of Naomi Goldman, who displayed her best schoolmarm demeanor. Everyone entranced by charm, good looks, and good behavior of children.

5:30 P.M. Left with caravan of Pe'ers, Goldmans, Askirelis, Ben Moshes, and Friedmans in pouring rain. All children in party. Stopped at hot springs and Byzantine baths as girls had not yet seen them. Then visited beautiful war memorial at Tsemah on south shore of Lake in inspiring setting at lakeside. Went on to wealthy and successful kibbutz of Afikim where we first dipped feet in sloppy bath as prophylaxis against hoof and mouth disease. Met Dr. Stern who is physician for the kibbutz. Took long walk with him and children and adults in tow to see housing, delightful dispensary and sick bay with 30 beds, nursery, playground and swimming pool, athletic gymnasium, heavy motor equipment, and amazing plywood factory which converts huge timbers from French West Africa into plywood, some 60% of which is sold to Britain. Had lunch in large communal dining room. Although fare was plentiful and wholesome and surroundings were cleanly, the service was somewhat reminiscent of the wholesale purveying at Rocky Point shore dinner hall. Huge room, light and airy, but would soon find lack of privacy intolerable. Distressed by incessant rain and mud for which we were not properly clothed. Impressed greatly by lack of internal transportation; access chiefly by walks of varying degree of adequacy from pure mud to flagstone to concrete. Air-raid shelters scattered strategically throughout area. 1,250 souls live in settlement and 500 more, mainly from Tiberias, employed in various activities.

After lunch visited Kevutsa Degania Alef, the first of all communal settlements founded in 1909, south of the lake in the Jordan Valley. Despite rain beauty of landscaping was everywhere in evidence. Struck by huge poinsettia in bloom. Vegetation largely tropical in character and disposed with considerable taste—its maturity is in contrast to much recent planting elsewhere. Visited their beautiful cultural center of chaste modern architecture—contains fine natural history library, auditorium, natural history specimens displayed with professional excellence, and the astronomical observatory. Our host was named Palmoni, a cultured gentleman, author of several books and an entomologist of note. Center called Beth Gordon in honor of its Hebrew philosopher-founder, reminiscent of Thoreau.

Sunday, January 3, 7:45 P.M. Left for hospital this A.M. about 9:00 A.M. after cashing more traveler's checks at bank and making final settlement with Mrs. Kugel, our shrewd and thrifty concierge. She seemed slightly sad at our leaving, and had somehow found out through her private G2 that we were heading for Galei Kinneret. After spending A.M. at hospital doing not very much (thyroid canceled because of intramural rhubarb over who should run blood bank and hence no blood available) and then met party at hot baths for formal tour. Are run by Mr. and Mrs. Meiri—she sister of Dr. Liesl Mayer, pathologist at State Hospital at Howard. Baths are really sumptuous, very well run, sanitary and beautifully housed in modern structure, decorated with many shades of fine quality Italian marble. Had pleasant lunch at baths as guests of Meirs. (The hot springs have been used since Roman times.) Then went on to Galei Kinneret.

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Tuesday, January 5, 8:30 A.M. Have already had breakfast, sitting in full view of lake with brilliant early morning sunshine. Lake rough from strong wind with constant muffled roar of small breakers —rather amazing when one considers modest width of this lake. Am up early as I think we shall really operate with 2 thyroids booked and bacteriologist placated anent blood bank. At 11:00 A.M. we are due to have official press conference.

Wednesday, January 6, 3:00 P.M. Went to hospital early yesterday with Pe'er. Did a very large toxic goiter in A.M., which went quite smoothly, although all surgery is made difficult by unaccustomed instruments. Because of OR, missed press conference held at 11:00 A.M., in which the standard questions were asked: how did we find things in Israel? etc. Followed with a tremendous modular goiter in a 30-year-old girl who had had previous operation in Morocco. Started off by dividing right carotid high up, which I eventually was able to repair. But apparently got one recurrent laryngeal and had bleeding from wound. Reopened and packed wound in OR, and Pe'er did tracheostomy at my request. Patient seemed OK as we left hospital at 7:00 P.M., but have not heard present state —she had not responded as of the time we left. Pe'er gave me day off today. Took boat trip from our hotel jetty to Kibbutz at Ein Gev, across lake. Ride very beautiful and interesting, and town of Tiberias from lake is imposing. Ein Gev founded in 30's and is one of the more prosperous ones in a beautiful setting on the lake, but close to the Syrian border. Main industries are dates, bananas, sardine fishing and canning, and tourism. Sardines are attracted to nets by bright lights and have to be picked out by hand — very colorful. St. Peter, Christ's apostle, fished these waters. Large auditorium houses 2,500 and has been host to Isaac Stern, Marian Anderson, Leonard Bernstein, and Danny Kaye—has music festival at Passover. All farm areas in serious difficulty with hoof and mouth disease. Have to dip soles in solution before entering and certain areas are quarantined against visitors. Ride over was in brilliantly lovely weather, but began to cloud over on way back and rained sharply just after we returned to hotel. Boat well-maintained passenger launch, owned 50-50 by Ein Gev and Israeli official tourist agency. Captain of ship, intelligent young Israeli, is member of Kibbutz.

Friday, January 8, 9:00 P.M. Left hotel in hired car about 10:00 A.M.—our driver was Nahum—hotel packed us box lunches. First we revisited Safad—stressing visit to Artists' Colony which is colorful and charming—certainly the quintessence of old world charm and medieval atmosphere. Narrow lanes and Safad blue are striking features. (A color used on buildings there for five hundred years.)

Saturday, January 9, 8:15 A.M. Weather mostly good yesterday, although a little cloudy in Safad for picture taking. From Safad we went on to Meiron where we saw the ancient synagogue dating from the 2d century and the tombs of Rabbis Yohanan and Shim'on; and nearby beside a deep ravine, a cave where, according to tradition, Rabbi Hillel and his disciples were buried—to escape the desecration of the Romans. At Bar'am we saw the beginning restoration of the ancient Graeco-Roman synagogue, the best preserved in Israel—so beautiful that it is used as a decoration for the ½-pound Israeli note. We stopped beside the road with the sparkling Mediterranean below us in the distance to partake of our box lunches, prepared by our hosts, Galei Kinneret—lunch plentiful and very satisfactory.

Then went on to Nazareth where I was able at last to get some pictures of shouk (market) although in failing light. Revisited Church of Annunciation and St. Joseph's Church. Returned to hotel after dark, about 5:00 P.M., after taking leave of Judy and Roman Pe'er—he is excellent guide and has excellent knowledge of this country to which he came as immigrant in 1940 after wandering all over Europe and middle east as far as India.

10:30 P.M. Pe'er came with car and driver and he acted as our efficient, informative, and charming guide for another day. We headed in direction of Haifa, but turned south in direction of Caesarea. Stopped briefly to view excavations at Beit-She'arim (House of Gates) from road—was important town in 2d century A.D.—later destroyed by Romans. Then on to Caesarea and its amazing seaport ruins—incredible that it was city of 250,000 in Roman days and now effaced from earth except for moldering ruins. Nearby Roman temple, even now being excavated with its handsome male and female figures in porphyry and white marble respectively—both sitting in headless majesty. Then on to Atlit where the Crusaders' Castle of the Pilgrims guards the seacoast, a lonely and brooding bastion. Passed through Haifa—a lovely city—passed the Carmelite monastery—took pictures from there and from the Panorama—passed the Bahai shrine with its golden and white dome and the white marble replica of the Temple of Athena on the Acropolis, of chaste and unsurpassed beauty. Stopped for a moment at the old Technion (Technical Institute). City very beautiful—much like San Francisco with magnificent harbor—view from Mt. Carmel unsurpassed. Finished our day at Akko (Acre) walking full length of the incredibly massive Crusader wall and visiting the Arab Quarter within the gates—visiting old market and harbor—and beautiful 18th

century mosque which is being restored—city colorful and charming with its blended medieval and 18th century European and Turkish architecture. Had dinner at hotel at usual hour — Frederick Marches and (Dr.) Burrill B. Crohn (the gastroenterologist) at next table.

Monday, January 11, 8:30 A.M. A brilliant sunny day with snow-covered Mt. Hermon rising ghostlike in the golden morning sunlight far across the lake. Spent last day at hospital yesterday. Explored a poor fellow with abdominal masses—peculiar pathology but probably TB—in presence of visiting surgeon-in-chief from Safad—a nice fellow. Repeated femoral arteriogram on little girl with a. v. communications—got better pictures but no more information — made last rounds. Toxic thyroid doing *very* well. Recurrent adenoma has *all* the complications except cerebral damage. Both recurrent nerves now out and has mild tetany. Also slight subcut. emphysemea of left side of face which is clearing. Packing removed with no further bleeding. If one recurrent (right, from initial examination) returns, she will be ahead of game. (She eventually recovered, with only slight facial palsy.) Took leave of all at hospital, including especially Mirvis who wants to spend year or two in states—we shall see what can be done.

Party last evening at hotel with 16 guests was unexcelled. Hotel gave us cocktail lounge as private dining room. Dinner excellent—I think a little special because of party. Plenty of cocktails, wines, and liqueurs. Bar going all evening—tended by two young and attractive fellows, one of whom supplied entertainment by playing accordion and piano *very* well. Party broke up amid many tearful farewells around midnight. Warmth of emotion was touching and almost without parallel to a pedestrian American like this diarist.

Wednesday, January 13, 7:00 A.M. A beautiful sunny day is dawning. On Monday A.M. we checked out of Galei Kinneret and started off for Tel Aviv about 10 A.M. in our private car with Gideon driving. Gideon was willing to take us on some important unfinished business, namely Beit She'an and the National Park near Afula. Because of unfamiliarity of driver we had to inquire in several languages before finding the former near an old Arab village now inhabited by Jews. We saw there the massive ruins of the best preserved Roman amphitheater in Israel and the huge Tel, site of ancient biblical city, which has been partially excavated by the U. of Penn. Our guide there was a diminutive Spanish- and Hebrew-speaking fellow. From there we went to the beautiful National Park, landscaped in exquisite taste about a crystal-clear stream and waterfall fed by nearby springs. Small fish could be seen playing in the glasslike water. Then on to Tel Aviv where we arrived about 2:00 P.M. Our driver was very competent, but rather fast, and he gave us a few chills. We had reservations at Ramat Aviv Hotel which is rather lovely, but somewhat outside of the city on the north.

8:00 A.M. Hotel is ultramodern with outside cottages, and swimming pool unused at this time of year (in which there is some vegetation growing and in which we saw a frog)—tastefully landscaped with cactus of several varieties and reminiscent somewhat of the hostelries at Las Vegas—except of course no gaming tables—and sparsity of furniture in room. Our bathroom, however, is best so far encountered—even shower curtain. In evening we walked to Opera House and saw adequate company play Madam Butterfly with cute Japanese girl playing lead and singing in lovely voice—whole production in Hebrew!—except we think lead, probably in Italian.

Met our driver at hotel today at 8:15 A.M. and left at 8:30 for 2 day trip to Jerusalem. Our driver, Josef, an estimable former Austrian who has been here 20 years, speaks excellent English—is good careful driver and we have a clean 1959 Dodge 7-seater. On way we saw many orange and grapefruit groves heavy with ripening fruit. We passed through Ramla, founded in 8th century, with its ruins of caravansary, and great tower built in 14th century, and Gezer and its excavations (1902), dating from the time of Solomon. At Kiryat Ya'rim we saw the Monastery of the Ark with its huge statue of Mary and Jesus on the hill and the Benedictine monastery in the village—restored from Crusader times and in turn on ruins of a Roman castle with spring flowing beneath. In climbing to the town thru ravine we passed the remains of many armored vehicles destroyed in War of 1948 and left as memorials to the gallant convoys to Jerusalem. On entering Jerusalem we passed Castel —high on mountain—controlling road—with fortification dating from Roman times—site of bitter fighting in 1948. At 12:00 noon we arrived at Hebrew University and made formal tour seeing Dead Sea Scrolls and magnificent buildings—taken on tour by charming English-speaking student guide. Checked in at sumptuous King David Hotel at 1:15 P.M.—met Dr. Joshua Cohen, director of hospitals, a Scotch lad — who then took us to Eitanim Hospital for lunch—psychiatric hospital on mountain top with breath-taking view—contrast of sere Arab held hills and green terraced Israeli countryside striking. Then did some sightseeing through housing developments and downtown area —got glimpse of Mt. Scopus, Mt. of Olives, and Mt. Sinai from observatory point right smack on Jordan border—could see Arab guards in sandbagged observation post on roof watching us

continued on next page

through glasses. Sun setting and air hazy from desert dust.

Thursday, January 14, 11:20 P.M. Back at Ramat Aviv Hotel in Tel Aviv. Arose early and after breakfast in room, all met Dr. Cohen at 8:30. He took us to Hadassah Visitors' Club where we met Dr. Karpas, administrator of Hadassah Hospital. With Joseph driving and a Hadassah guide we visited the magnificent new buildings of Hebrew University Medical School and Hadassah Hospital on lofty bluff overlooking Ein Karem—much construction work —very dusty—question circular ward building and distance from city—but buildings beautiful and impressive. Visited nice center at Kiryat Hayovel where pilot Family and Community Health Service is conducted—treating families instead of people—may work well in Israel. Then released by Hadassah to continue sightseeing with our indefatigable Joseph. Visited Mea Shearim, the Chassidic orthodox Jewish quarter which is quite picturesque, and the handsome new building of the Chief Rabbinate. Then got glimpse of Bethlehem, visited Tomb of King David (Mt. Zion), site of the Last Supper, and room commemorating the Nazi massacres, Chamber of Destruction. In morning visited the Knesset (Parliament) (not in session)—and saw massive bronze Menorah (ritual candelabra) intricately modeled, gift of British Parliament. Also Mandelbaum Gate (which is not a gate)—portal of entry to Jordan. Jordanian and Israeli guards in sandbagged positions all about. Left Jerusalem for Tel Aviv just at dusk and returned to city in dark at 6:00 P.M. Weather warm and clear most of day—but desert dust haze increased in late afternoon.

Friday, January 15, 10:30 P.M. Our stay in Israel fast drawing to a close. Left at 8:30 A.M. to visit two largest hospitals in Israel with Joseph driving. Visited beautiful Beilinson Hospital (800 beds) first, which is operated by Kupat Cholim—met at front by affable and gracious young Dr. Amon Fried, Chief of Orthopedics and friend of Doctor Caroll Silver of Providence. He introduced me to young Dr. Sasson Yadoo who is chief resident of one of the two surgical services under Prof. Nathan, who was absent. He took me around and we discussed briefly patients on his wards. We all cabbed over to Tel Hashomer, which is an army hospital caring for 80% civilian patients, where we were met by Col. (M.C.) Spira in army uniform, chief of orthopedics, formerly organizer of medical services of Haganah, and of British medical services for Montgomery at El Alamein. A fine looking and highly intelligent gentleman. He and Dr. Sheba (internist, director of hospital and authority on the chemistry of genetics) took us around hospital. Hospital former British Army Hospital, originally built by U.S.A. as station hospital of cement block pavilions. Has 800 patients with capacity of 1200 —but can expand to 3000 under wartime conditions.

Dr. Spira brought us back to hotel—thence to picturesque Jaffa, where we saw Arabs smoking hookah water pipes on their Sabbath (Friday) and to terrace overlooking Mediterranean, near 300-year-old Church of St. Peter, built on Crusader foundations—rocks offshore site of story of Perseus and Medusa. City of Tel Aviv draped in pall of yellow smog caused by hot dusty winds from Arabian desert called Hamseen or Sharaf. Then on to lovely Mediterranean beach in sunset, where a few brave souls were frolicking on the beach and in the surf; ended our afternoon trip with a tour of the Weizmann Estate and grave at modern Rehovath. Landscaping is breathtakingly beautiful. Nearby Weizmann Institute is magnificent with new modern building of outstanding architectural virtuosity—a pity that it was too dusky to take pictures.

Saturday, January 16, 9:45 P.M. Left at 8:15 A.M. for trip to northern Negev. Visited the diggings at ancient Ashkelon, once an important Graeco-Roman port—saw remains of the inevitable Crusader walls, scattered columns and carvings from what must have been a very pretentious and beautiful Roman center. Then south to the Israeli guard station at the northern end of the Gaza strip and saw U.N. posts in the distance—saw Arabs plowing fields with camels in Egyptian Territory. We then began our trip across the northern Negev —land becoming increasingly arid as we traveled westward and finally as forbidding as any area on earth. Day warm and haze from persistent hamseen often almost obliterated outlines of distant objects. In the midst of sere desert we came upon modern Beer-Sheba—a near miracle in the desert having grown from a village of 300 to a mushrooming progressive city in 10 years. Stopped for lunch at the beautiful modernistic HIAS Negev center (Hebrew Immigrant Aid Society). Then deeper into the desert to an elevation of 1400 ft. and then the precipitous drop of 2700 ft. through a gorge of breathtaking grandeur with dun-colored precipices to a level of 1300 ft. below sea level, the lowest point on earth. Here we saw the potash and bromine plants at modern Sodom and the youth hostel on the shore of the lake backed up against sheer cliffs of age old rock salt, remaining undissolved in the desert air and acting as the rookery of innumerable chatting crows. We all tasted the salt water, containing 27% of solid matter. Then began our climb back to reality and in the hazy dusk saw many bedouins leading their camels back to tether near their low-lying black tents. Surprised at the numbers of camels we saw grazing on the poor desert stubble all afternoon. Reached Beer-Sheba at dusk and then began our

long ride back to Ramat Aviv, arriving at about 7:00 P.M. Bade a nostalgic farewell to our faithful and intelligent companion and guide, Joseph, who himself seemed a little sad at parting.

Sunday, January 17, 12:00 midnight. We have at last completed our month in Israel and our last day was as eventful as any. After breakfast we met our taxi for nearby Arkia airport (hardly 2 blocks from hotel). 8:30 A.M. flight took off about 9:00 A.M. in a nice clean DC3—one hour to Eilath—first flying down coast and then turning inland over now familiar Ashkelon and later Beer-Sheba, flying over some of the most desolate desert mountains to be seen anywhere on earth—dun-colored in the hamseen yellowish haze with occasional flashes of blue of the higher peaks piercing the haze here and there. From the plane could be seen the regular black cross-hatchings in the mountain run-offs and wadis, the dams of the ancient Nabateans. We came out over Eilath and the upper Gulf of Akaba about 10:00 A.M. and swung into the little airport in the same yellowish haze—which almost all day almost obscured the lofty mountains of Trans-Jordan and Saudi Arabia. We were met at the airport by Raphael, our ex-German English-speaking guide and his jeep pick-up—ex-soldier, prospector, army photographer, and jack-of-all-trades. He took us through this surprising town of 6 to 7000 souls which shortly after the Sinai campaign sheltered only a few hundred. Many new housing areas are springing up—colorful and attractive in true Israeli style—we passed the Philip Murray center and other points of interest. He then took us to a youth pioneer camp in the desert (Beit Ora) where pre-army boys and girls were working hard at cleaning up and planting trees and shrubs. Then on to the fabulous King Solomon copper mines hard by King Solomon's Pillars — lofty amazing out-croppings and picked up pieces of quartz artifacts, shards, copper ore, and even a piece of petrified charcoal—also piles of stones and the remains of the wall enclosing the slave encampment—lying as they were left in the desert air 3,000 years ago. We then spent some time looking over the new copper extracting plant which sends its 70% copper extract to Japan. Then to a little new beach development where we had lunch. Jeep boiled over on way back but we managed to make town. In the afternoon we went out in the glass-bottomed boats—my first look at this colorful fairyland of coral and brilliant fish—despite 2 years in the SWPA and trips to Bermuda and Florida. Disturbed by plane leaving 2 hours late because of necessity for regular plane to return to Tel Aviv because of engine trouble. Bade adieu to Raphael and took off in dark at 7:00 P.M. Before dusk the haze had lifted enough so that we could see Akaba and the Arabian border point 5 miles away across the Gulf—and later the lights of the town. On arriving at hotel we had late dinner at 9:00 P.M. Sat with Goldmans in lobby who had come up to bid all of us farewell. To our room at 10:00 P.M. to pack. Pe'er called us earlier to bid us good-bye—but we had not returned and he bade us a good journey by message. Lovely flowers in all rooms from Mrs. Spira to girls. To bed 12:45 A.M.

We departed from Tel Aviv on January 19th, one month to the day after our arrival. On taking leave of this interesting and intense little country we spoke the traditional Hebrew farewell, "Shalom" ("Peace," expressing, as does the graceful Hawaiian "Aloha," both greetings and farewell).

Check . . .

MAY 2 and 3, 1961

150th MEETING

Rhode Island Medical Society

See program on page 200

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DISTRICT MEDICAL SOCIETY MEETINGS

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, March 6, 1961. The meeting was called to order by the president, Doctor Frank D. Fratantuono, at 8:30 P.M.

Minutes of Previous Meeting

The president announced that the minutes of the previous meeting would not be read but would be published in the RHODE ISLAND MEDICAL JOURNAL.

Report of the Secretary

Doctor William A. Reid reported on the Executive Committee as follows:

At a recent meeting of the Executive Committee matters relating to the status of certain members were resolved, the committee appointments of the president were approved, co-operation was extended to the Providence Junior Chamber of Commerce in its plans for the 325th Anniversary Celebration of the City of Providence, the plans of the Program Committee were reviewed, and the annual financial report of the Medical Milk Commission was received and reviewed.

The Executive Committee also reviewed the application and supplementary data submitted with the request for membership in the Association of Doctor Charles H. Jones, superintendent of Butler Health Center, and it now recommends to the Association his election as an active member.

Mr. President, I ask approval of this report and the election of Doctor Charles H. Jones to active membership.

Action: It was moved that the report of the secretary be received and placed on file and that Doctor Charles H. Jones be elected to active membership. The motion was seconded and adopted.

Announcements by the President

Doctor Fratantuono called to the attention of the membership that the April meeting would be held on the second Monday of the month — April 10th — instead of the customary first Monday.

He also called attention to the legislation introduced into the General Assembly by the State Medical Society to provide a physicians' lien on a claim for services rendered to a person injured by reason of an accident not covered by the workmen's compensation act. He urged the members to write to the Committees on Judiciary of both the House and the Senate urging passage of the legislation.

Introduction of Textron Pharmaceutical Company President

Doctor Fratantuono called to the attention of the membership that the Textron Pharmaceutical Company had a display in the reading room of the Library and he called upon the president, Mr. Robert E. Grant, to address the membership briefly on the plans of the company which will operate out of Providence.

Scientific Program

The president introduced Doctor Alexander D. Langmuir to moderate a symposium on poliomyelitis. Doctor Langmuir is chief, Epidemiology Branch, Communicable Disease Center, Atlanta, Georgia, and a member of the Public Health Service Advisory Committee on Live Poliovirus Vaccine.

Doctor Langmuir called upon Doctor Joseph Oren, chief, Poliomyelitis Surveillance Unit, Epidemiology Branch, Communicable Disease Center, U.S. Department, Health, Education and Welfare, Atlanta, Georgia, and a leader of the PHS team to study the 1960 Providence epidemic, who gave a report on the Providence epidemic in 1960 utilizing descriptive material, copy of which was distributed to each member attending the meeting.

The annual poliomyelitis rate for the Rhode Island epidemic was 12/100,000 which is very much below the 1955 epidemic. The peak incidence occurred in July which is more than a month earlier than the previous epidemics and was concentrated in crowded lower middle and lower class homes, chiefly two housing projects.

Doctor Robert E. Serfling, chief, Statistics Section, Epidemiology Branch, Communicable Disease Center, Atlanta, Georgia, and an active consultant in Providence studies, was introduced by Doctor Langmuir to give a presentation on *Evaluation of the Control Program.*

A total of 121 cases were studied and of these 100 were proved poliomyelitis, 73 paralytic, 27 non-paralytic.

concluded on page 233

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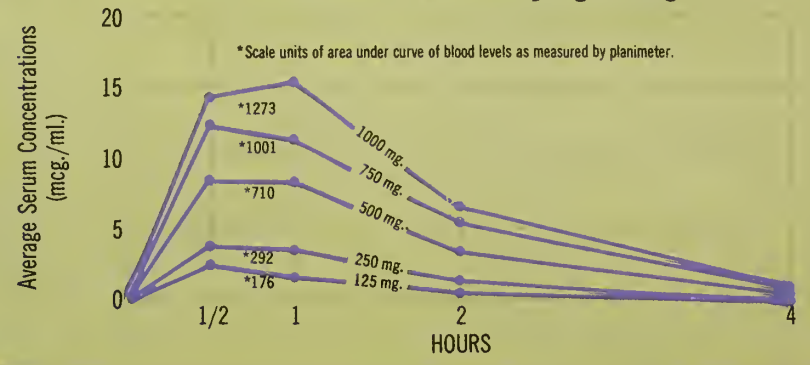
	Minimum Inhibitory Concentration Micrograms per Milliliter
Bacillus anthracis	0.03
Bacillus cereus	25
Bacillus circulans ATCC 9961	6.25
Corynebacterium xerosis	0.03
*Diplococcus pneumoniae	0.06
Escherichia coli ATCC 8739	>100
Gaffkya tetragena	0.015
Micrococcus flavus	0.015
Salmonella paratyphi A	25
Salmonella typhosa	>100
Sarcina lutea ATCC 10054	0.007
Shigella sonnei	100
Staphylococcus aureus 209P	0.03
Staphylococcus aureus var. Smith	0.03
Streptococcus agalactiae ATCC 1077	0.03
Streptococcus dysgalactiae ATCC 9926	0.03
Streptococcus faecalis PCI 1305	6.25
*Streptococcus pyogenes 203	0.06
*Streptococcus pyogenes Digonnet	0.06
Streptococcus pyogenes 2320	0.03
Streptococcus pyogenes 23586	0.06
Vibrio comma	25

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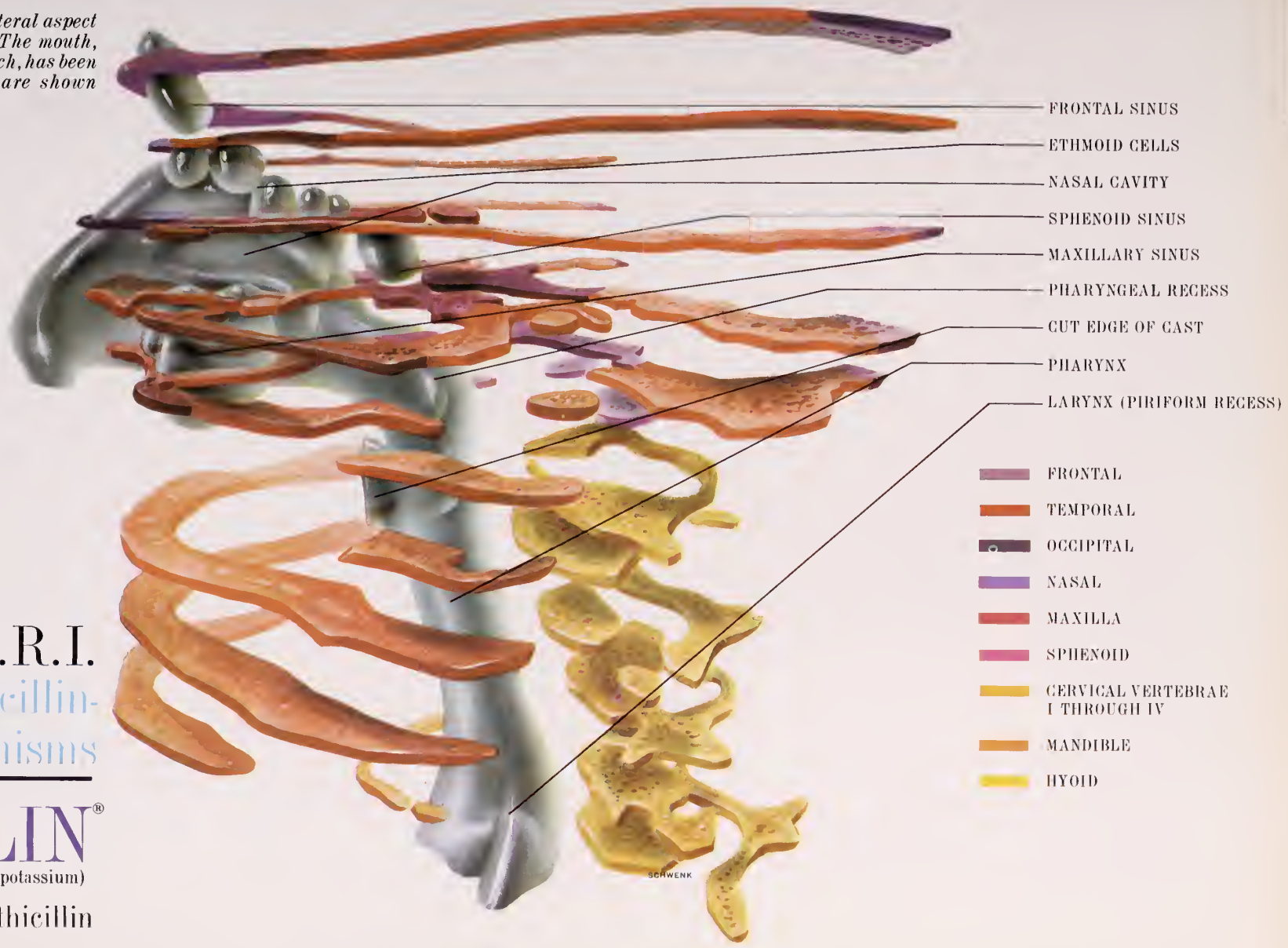
Serum levels with varying dosage



As is true with all antibiotics, clinical response does not always correlate exactly with in vitro bacterial sensitivity reports or laboratory blood level findings. However, these are useful guides.

Dosage: 125 mg. or 250 mg. 3 times a day, depending on severity of the infection, and on age and weight of the patient. Larger dosage (e.g., 500 mg. t.i.d.) may be used for more severe infections. Although maximum absorption is obtained in the fasting patient, clinically adequate blood levels are almost always obtained when SYNCILLIN is administered with meals. Treatment should be continued until physician is confident infection has been overcome. ☐ Beta-hemolytic streptococcal infections should be treated for at least 10 days to help prevent the development of rheumatic fever. Even more prolonged therapy may be required for certain staphylococcal infections. ☐ Complete information on indications and precautions is included in the official circular accompanying each package.

This diagram represents the lateral aspect of the upper respiratory tract. The mouth, anterior to the glossopalatine arch, has been omitted. Skeletal landmarks are shown in color-coded serial sections.



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caused by penicillin-sensitive organisms

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the ORIGINAL phenethicillin

PROVIDENCE MEDICAL ASSOCIATION

concluded from page 232

In both groups the great majority were under ten years of age, 59% males, 41% females. There were many more bulbospinal, bulbar, and facial paralyses than usually encountered.

Incidence was lowest in the well vaccinated. A vaccine effectiveness of 81% was calculated.

The mass vaccination done in doctors' offices and public clinics is credited with being largely instrumental in stopping the epidemic.

The highest number of vaccinated people was found in the upper classes. It was pointed out that a large segment of the public remains unprotected.

Doctor Langmuir concluded the formal presentations with a discussion on *Current Status of the Oral Poliovirus Vaccines.*

Discussion

Doctor Raymond F. McAteer, assistant director of Health, Rhode Island State Department of Health; Doctor Joseph Smith, superintendent of Health, City of Providence; and Doctor Edward J. West, superintendent, Charles V. Chapin Hospital, Providence, discussed the report as submitted by the public health officials from Atlanta.

Adjournment

The meeting adjourned at 10:30 P.M.
Attendance was 138.
Collation was served.

* * *

A regular meeting of the Providence Medical Association was held at the Medical Library on Monday, February 6, 1961. The meeting was called to order by the president, Doctor Frank D. Fratantuono, at 8:30 P.M.

Minutes of Previous Meeting

As a reading of the minutes of the previous meeting was not requested, a motion was passed that the reading be dispensed and that they be published in the RHODE ISLAND MEDICAL JOURNAL.

Announcements by the President

Doctor Fratantuono announced that committee appointments have been made, and the men notified of their appointments.

He reported that the unexpired term on the executive committee of Doctor J. Merrill Gibson, who was elected vice-president at the annual meeting, would be filled by Doctor Gustavo A. Motta, of Providence.

He read announcements of a medical lecture to be held at Providence College on February 13 and a meeting of industrial physicians to be held on February 22 at the Cranston Print Works.

Presentation of Membership Certificate

Doctor Fratantuono awarded a certificate of membership in the Association to Doctor Jan S. Dudek who was elected at the January meeting of the Association.

Scientific Program

Doctor Fratantuono announced that due to illness in his family Doctor Richard A. Field had been unable to come to Providence to address the Association. However, Doctor William A. Hall, clinical research fellow at Massachusetts General Hospital and fellow in medicine at Harvard Medical School, had consented to replace Doctor Field on the program. He opened the discussion of the subject *Hypophyseal Stalk Section in the Treatment of Hemorrhagic Diabetic Retinopathy.*

Doctor Hall stated that marked improvement in diabetic retinopathy had been observed following post-partum hemorrhage and pituitary necrosis. This observation led Doctor Field and Doctor William H. Sweet to devise a method to produce anterior pituitary necrosis by sectioning the hypophyseal stalk which has proved highly successful in halting the advance of diabetic retinopathy.

Endocrine side effects are considerable. All develop myxedema if not treated. All develop a transient diabetes insipid. There is a drop in 17 ketosteroids. Some require salt-retaining steroid. All males become impotent but are relieved by testosterone. All become sterile.

Doctor Joel S. Contreras, clinical fellow, Massachusetts Eye and Ear Infirmary and consultant ophthalmologist, Diabetes Unit, Massachusetts General Hospital, continued the discussion and described in detail the ophthalmologic changes in diabetic retinopathy following pituitary stalk section.

General Discussion

The general discussion was led by Doctors Louis I. Kramer and Hannibal E. Hamlin.

Adjournment

The meeting adjourned at 9:50 P.M.
Collation was served.
Attendance was 48.

Respectfully submitted,
WILLIAM A. REID, M.D., *Secretary*

ANNUAL GOLF TOURNAMENT

and

DINNER

Wednesday, June 14, 1961

Providence Medical Association

BOOK REVIEWS

CANCER OF THE CERVIX. Diagnosis of Early Forms. In honour of Prof. Dr. C. Kaufmann. Ciba Foundation Study Group No. 3. Editors: G.E.W. Wolstenholme and Maeve O'Connor. Little, Brown & Co., Bost., 1960. $2.50

The Ciba Foundation is to be congratulated on bringing together such outstanding authorities from Europe and America to present their different views on the early diagnosis and treatment of cancer in situ of the cervix.

This small book of one hundred and ten pages is a collection of papers on the subject, rather than a textbook. The book consists of six reports with an added short communication on atypical hyperplasia of the endometrium with an attempted definition of Stage-0 carcinoma corporis uteri.

Each article is presented by a different writer who has devoted many years of research in his particular field of interest. The papers presented show thorough, careful work, and each article is followed by a bibliography and a discussion participated in by each worker attending the symposium.

The first paper is concerned with the classification of so-called carcinoma in situ. Doctor Hamprel applies the morphological concept to his classification and distinguishes five groups. One is impressed with the difficulties in the proper interpretation of the different groups presented. Doctor Hamprel himself concludes that proper evaluation of his classification must await further careful follow-up of his patients.

The second paper presented by the Radiumhemmet group also is concerned with the classification and early diagnosis of carcinoma in situ of the cervix. It is simpler than the first classification. Their Stage-0 generally follows Doctor Novak's definition of carcinoma in situ. It is interesting to note that they subdivide Stage-I cancer into Stage-Ia, or preclinical carcinoma, and Stage-Ib, or clinical carcinoma.

It is a well-known fact that the criteria of early invasive carcinoma vary considerably among different pathologists. These two first papers show the importance of an early agreement, at an international level, on a recognized classification, so that, when we present our therapeutic results for the different stages, we shall be speaking the same language.

There is no doubt that much remains to be learned about carcinoma in situ, and it is to be hoped that an international classification can soon be established to help in a better understanding of its complex ramifications.

A paper on the use of the optical and electron microscopes is very interesting. In time the study of chromosomal and cytoplasmic cytopathology will add to our knowledge, but at present diagnosis still depends on the cellular and structural anomalies of the epithelium.

Doctor James G. Lawson seeks a biochemical approach to a better understanding of carcinoma in situ. His group is studying the activities of enzymes in the vaginal fluid. Evaluation of the biochemical approach must await further research and investigation "both from the diagnostic and the prognostic aspect."

The paper presented by C. Kaufmann and K. G. Ober describes an attempt to determine the incidence of carcinoma in situ of the cervix in different age groups. This interesting article shows that, in the child-bearing age, glands extend over the portio surface of the cervix and are low in the cervical canal. In older women the glands are located deep within the cervical canal. It is well to keep this fact in mind when doing a cone biopsy. In older women cervical conization should extend deep towards the internal os but in young women it need not be so extensive. Their investigation shows also that squamous epithelium extends further into the cervical canal with increasing age. Cancer in situ is found at the squamous-columnar junction, but it is also frequently found over the lower cervical glands. This point should be remembered when taking a Papanicolaou smear to include cells from the endocervical canal.

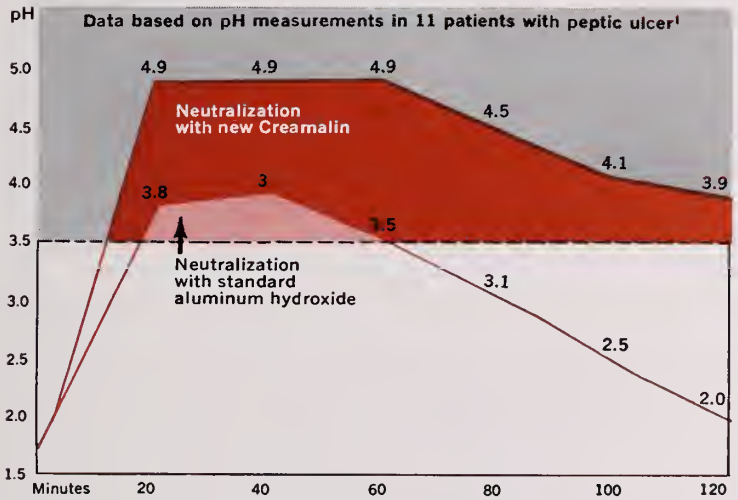
The last article in this series is by Doctors P. A. Young and A. Y. Kevorkian. It is a very practical clinical study outlining the method used at the Free Hospital for Women in Brookline, Massachusetts, for the detection and therapy of cancer in situ. They emphasize the importance of using all methods of detection available for the early diagnosis of cancer in situ and early malignant lesions of the cervix. They make use of the Schiller test and consider multiple punch biopsies of the entire cervical surface and endocervical curettage as an adequate

concluded on page 236

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Dosage: Gastric hyperacidity — from 2 to 4 tablets as necessary. Peptic ulcer or gastritis — from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. **How supplied:** Bottles of 50, 100, 200 and 1000.

1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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BOOK REVIEWS

concluded from page 234

method for ruling out invasive cervical carcinoma. They state that, if all the methods available for the diagnosis of cancer in situ were applied by all physicians routinely and periodically, cancer of the cervix would be largely prevented. The article is followed by an appendix covering thoroughly the use of the Schiller test. It includes diagrams of cervices showing the various normal pathological conditions revealed by this test.

This book is a useful addition to our knowledge and understanding of cancer in situ as well as the many related problems yet to be solved. All of the papers are carefully prepared incorporating the best known facts. I particularly enjoyed it and recommend it highly to all gynecologists and clinicians who are interested in obtaining a better understanding of this condition.

RALPH DILEONE, M.D.

SIGHT. A Handbook for Laymen by Roy O. Scholz, M.D. Doubleday & Co., Inc., Garden City. 1960. $3.50

This very readable book, written as the author states "to help answer the many intelligent questions patients ask their eye doctors," admirably accomplishes its purpose. In its 262 pages there is a wealth of general information which could be read by teachers, general practitioners, and pediatricians especially with great benefit both to themselves and their patients.

Closely associated with the Wilmer Ophthalmological Institute of the Johns Hopkins Hospital for over twenty years, in both a clinical and teaching capacity, the author is immensely qualified to write a book on ophthalmology for lay consumption.

The chapters on crossed eye, glaucoma, and cataracts are especially well written. There is a complete glossary of terms which is helpful in understanding an ophthalmologist's special vocabulary.

The author's knowledge and interest in the history of medicine adds spice to the information presented. Highly recommended.

LEE G. SANNELLA, M.D.

THE LIFE EXTENSION FOUNDATION GUIDE TO BETTER HEALTH by Harry J. Johnson, M.D. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1959. $4.95

The material for this book, written for the layman, comes from the medical records of the Life Extension Examiners, of which the author, Harry J. Johnson, M.D., is the medical director, and from the files of the companion organization the Life Extension Foundation. The book is written in simple language; the style suggests a family doctor talking to a group of his patients. There are many anecdotes, some familiar, as the story of Mark Twain being relieved of his dyspnea after mistakenly breaking a glass bookcase instead of a window, others from the author's experience.

Doctor Johnson stresses the need for adequate sleep and recreation. He recommends a balanced diet and emphasizes that fads, health foods, and vitamins are unnecessary for the maintenance of normal robust health. Patients on reducing diets should be urged to change their eating habits and should not count calories, using calorie tables only as a guide for identifying foods to be avoided. In the chapter on tensions he points out that such emotional states are normal, and the trouble comes only when we deal with our tensions unrealistically. Alcoholic beverages and tobacco are permitted for most people moderately, but Doctor Johnson admits he does not smoke. Heart disease and hypertension are discussed in separate chapters, simply but factually.

In the concluding chapters, exercise in a sensible manner and regular periodic medical examinations are urged for everyone.

This book has no interest for the physician himself, but when patients ask the doctor to recommend a good health book, this one can be mentioned without reservation.

A. L. LAGERQUIST, M.D.

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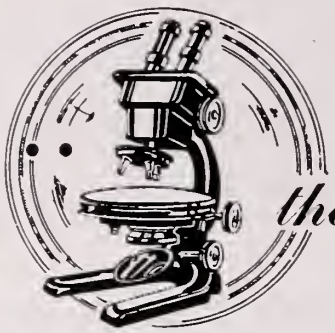


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THROUGH . . .  *the Microscope*

Public Health Service Studying Flu Epidemics Overseas

Doctor Luther L. Terry, Surgeon General Designate of the Public Health Service, said recently that the Service is studying all aspects of the influenza epidemics now occurring in Great Britain and Japan.

He said that a Public Health Service physician, stationed in London, is sending frequent reports on the British epidemic to the Service's headquarters in London. Data on the Japanese epidemic is supplied to the Service by the World Health Organization. Also, the Service's Communicable Disease Center in Atlanta is in touch with all state health departments to check for signs of increased incidence in this country.

Thus far, Doctor Terry said, there seems to be no indication that the United States should expect any unusual number of influenza cases.

Although influenza is not one of the diseases that must be reported to the Public Health Service, over half the state health departments at this time last year had indicated that flu was prevalent in their areas. None has done so this year. Another indication that there is no unusual amount of influenza here this year is found in the mortality data which 108 cities routinely report to the Communicable Disease Center each week. Last year, the total flu and pneumonia deaths reported by these 108 cities ranged between 600 and 1,000 deaths a week in January and early February. This year about 500 such deaths have been reported each week. This is well within the limit of what would normally be expected at this time of year.

Asian influenza was the type prevalent here last year and is the type now causing the epidemic in Great Britain. Exposure to cases last year should give most Americans immunity to Asian flu for the next two or three years.

The epidemic in Japan, however, is believed to be caused by the B-type influenza virus, which has not been prevalent in this country for about six years. This makes the Japanese epidemic more of a threat than the Great Britain epidemic, Doctor Terry said, although there is presently no cause for alarm.

He said that some people are protected against both types of flu because they have been vaccinated with multivalent vaccine which provides protection against Asian, B and two other types of influenza.

Last fall, Doctor Terry pointed out, the Public Health Service instituted a campaign to urge private physicians and public health officials to do all they could to see that flu vaccine was given to persons with certain types of diseases (such as cardiac disorders, bronchopulmonary diseases, diabetes, and Addison's disease); to pregnant women; and to all persons over sixty-five years of age. In the past, most influenza deaths have occurred among these three groups.

"If the people in these three groups have been vaccinated so that they do not get the disease," Doctor Terry said, "there will be little danger of influenza fatalities even if an epidemic should occur."

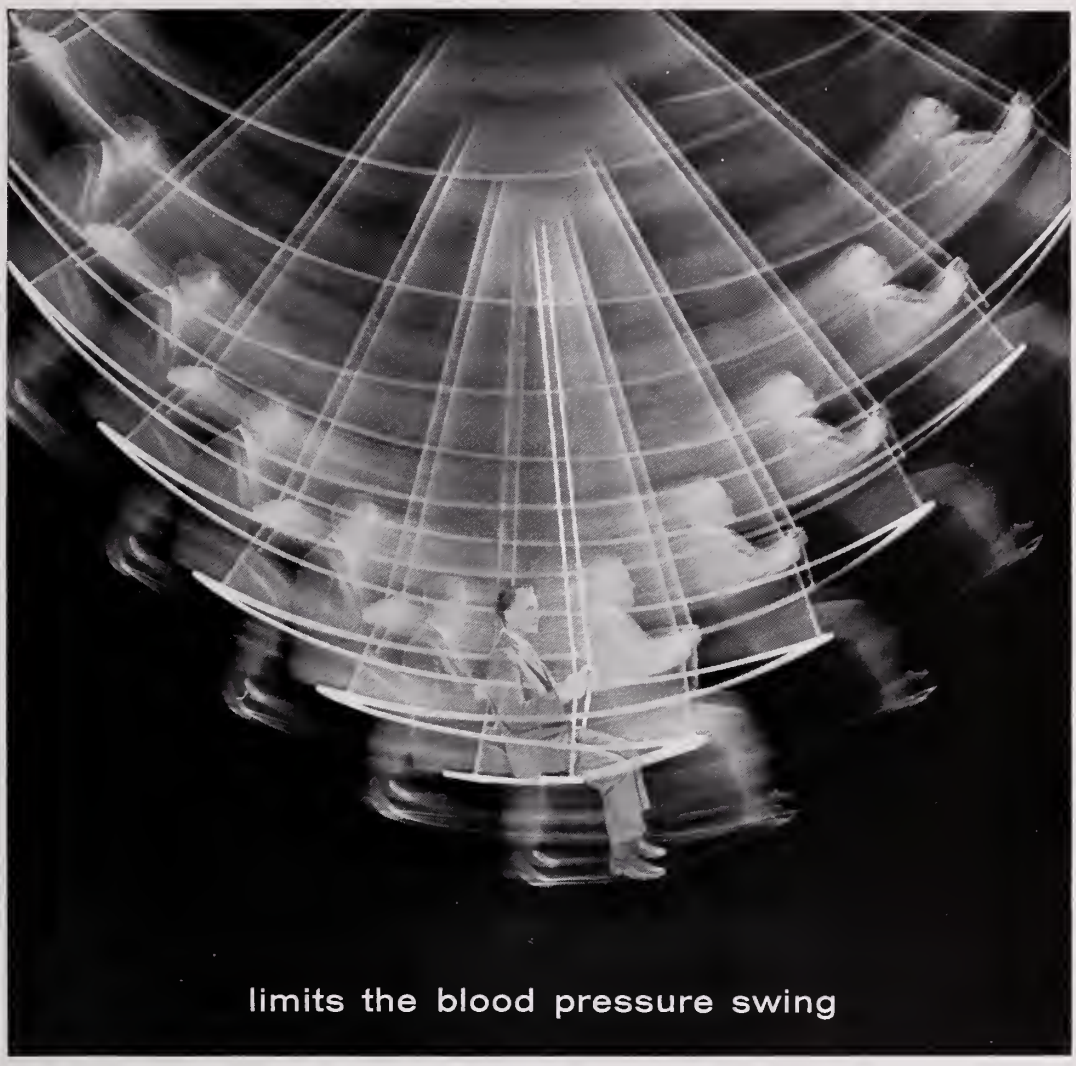
Vaccination after an epidemic strikes has little effect, according to Doctor Terry, because every one is exposed to the disease almost simultaneously. He urged that those in the three groups for whom the disease is sometimes fatal get vaccinated now if they did not do so last fall.

According to informal reports from manufacturers of vaccine, there is an adequate supply for continued vaccination of the high risk groups, even though stocks of some individual manufacturers are depleted.

Schizophrenia on the Rise

This nation's number one mental health problem, schizophrenia, is on the rise, according to *Patterns of Disease*, a Parke, Davis & Company publication for the medical profession. Of patients with mental disorders newly admitted to state hospitals, schizophrenia tops the list with 23%, followed closely by senile psychosis and cerebral arteriosclerosis which together account for 21%. Alcoholism ranks third with 14%, according to *Patterns*.

continued on page 240



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THROUGH THE MICROSCOPE

continued from page 238

Medicine's Biggest Mystery

Colds and other respiratory tract infections put more Americans out of action each year than all other acute illnesses combined, according to a current issue of *Patterns of Disease,* a Parke, Davis & Company publication for the medical profession.

Of all acute conditions — those lasting from 1 to 90 days — three out of every five are respiratory. And one in every three respiratory infections is a cold.

Compared to the vast numbers stricken annually by respiratory illnesses, the casualty rate of other acute conditions is fairly light. Infections and parasitic diseases, for instance, though the second major cause of acute illnesses, account for only slightly more than one in every ten of these conditions. And such other ailments as those of the digestive system, fractures and sprains, and open wounds and lacerations, each comprise even less than one in every ten.

In terms of lost workdays, the annual toll exacted by respiratory infections is a staggering one. In one year 80 million workdays were lost because of them — a figure which represents 41% of all workdays lost because of acute conditions. Injuries, the second leading cause of absence from work, were responsible for 31% of days lost due to acute illnesses.

The loss of school days is even greater. More than 110 million school days are lost annually through respiratory illnesses — and 58% of all absences from school due to acute conditions are caused by respiratory ailments.

Yet although these illnesses inflict such huge annual damage, they remain, medically speaking, a mystery. Even efforts to pinpoint causes have fallen far short of success.

Old-Age Hospitalization Coverage Extended by Continental

A broad, private industry solution to the growing need for effective old-age hospitalization protection was announced early this month by Continental Casualty Company, Chicago.

For the first time, the company will provide on a national basis its combination insurance package consisting of "65 Plus," a short-term hospital-surgical plan, and "5,000 Reserve," for extended hospitalization protection.

Tailored to the needs of persons 65 and older, the plan stems from Continental's experience in insuring more than 1,000,000 persons in the retirement years.

It was designed on the basis of four principles



which the company believes are vital to the effectiveness of any old-age health plan, namely: (1) the insurance must be available to everyone 65 and over; (2) it must be permanent; (3) it must cover medical and health conditions existing prior to enrollment; and (4) it must have a low monthly premium.

Under a newly announced Continental policy, persons not now 65 may apply for the program at any time within 30 days after reaching their 65th birthday.

Despite the widespread mistaken notion that the aged are unable to pay for their medical care, surveys show that 50 per cent of the aged already have some form of hospital insurance, and most can meet their medical bills.

According to these surveys, 80 per cent of the aged say they could pay a $500 medical bill from their own resources, while 68 per cent said they could handle a $1,000 to $5,000 bill.

Thoughts for Taxpayers

The New Jersey Taxpayers Association has recently called attention to some facts of compelling significance to all taxpayers. In New Jersey during the calendar year of 1959, taxes reached the grand total of four and one-half billion dollars—an average of $770 for every man, woman, and child in the state.

And where does the money go? Of the $4½ billion paid by New Jersey taxpayers last year $3,345,000,000 represented this state's share (more than 4%) of the total federal tax bite totaling nearly $80 billion. In addition, $345 million went for state government in New Jersey; $142 million for county government; $346 million for municipal government; and $373 million for schools. The grand total comes to $4,551,000,000. . . . Each New Jersey child today has a $2,000 mortgage—his share of the $286 billion federal government debt.

New Jersey pays a high rate for federal aid—$2.62 for every dollar in aid received. The cost of a federal "aid" dollar in New Jersey was topped only in Delaware, whose taxpayers paid $2.65 for each dollar in "aid" received from Washington. Other states paying in premium for every dollar of federal aid received included Connecticut, $2.05; Indiana, $1.87; New York, $1.79; Illinois, $1.71; Pennsylvania, $1.67; Ohio, $1.40; Maryland, $1.38; Michigan, $1.38; Wisconsin, $1.30; Massachusetts, $1.29; Virginia, $1.15; California, $1.08. All other states receive "cut rate" federal aid dollars ranging from 97 cents for Florida to 16 cents for Alaska.

The "cut rate" list follows: Florida, 97 cents;

continued on next page

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...As reported in the *Membership Newsletter* of the New Jersey Medical Society, January, 1961

Outlook for New England Employment in 1961

Second-half 1961 trends in employment are likely to be more vigorous than in the early months of the year, the Bureau of Labor Statistics of the U.S. Department of Labor reports. Based upon seasonal factors alone, the course of New England's manufacturing jobs in the first five months of 1961 should slope downward. The trend of the Region's factory employment, again based upon seasonality, should be upward throughout the last half-year. Some temporary interruption will be occasioned by July vacation shutdowns.

During much of 1960, month-to-month performances of the factory sector have been below the customary seasonal strength. The normal seasonal decline expected in early 1961 may be intensified by cyclical contraction unless there emerges a reversal in trends not currently visible.

The seasonal expectancy for nondurable manufacturing differs widely from durable goods in New England. More responsive to calendar forces, the first-named group can be expected to decline in January, rally briefly in February, and then drift successively lower in March, April, and May. The record of 1960 has been one of less than average seasonal strength, particularly in textiles and shoes, and a deeper than usual dip remains a possibility for early 1961.



Nurses Ask Legislation for Collective Bargaining Bill

Representatives of the Oregon Nurses Association met in early January with the Oregon State Medical Society's Liaison Committee and a few days later conferred with the president and president-elect of the Multnomah County Medical Society on a vital issue that could well affect the cost and quality of patient care throughout the state.

The issue is a legislative proposal sponsored by the ONA which would require employers in health care facilities with four or more employees to enter into collective bargaining on wages and working conditions. It further provides that in event agreements are not reached in this manner, the State Commissioner of Labor shall conduct an investigation and publish his findings in the news media of the area.

Catholic Hospital Services Reported in New Directory

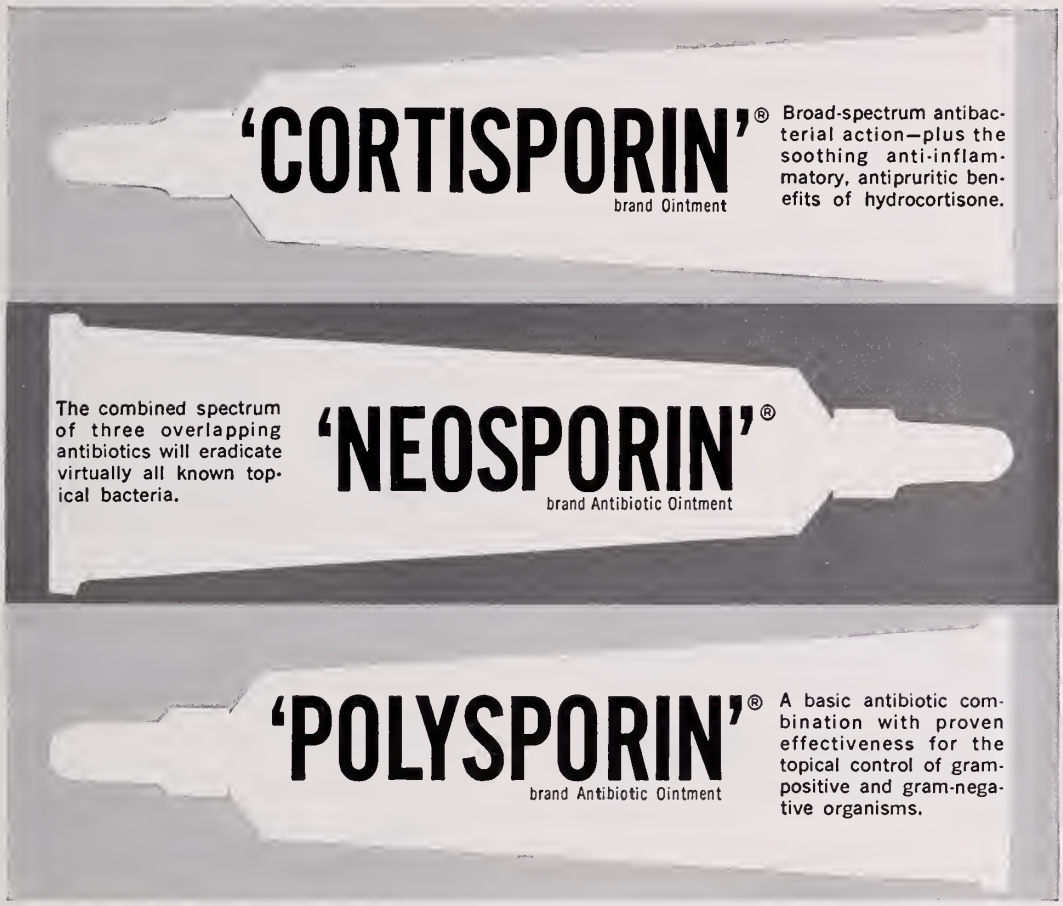
The 32d annual directory issue of HOSPITAL PROGRESS magazine issued by the Catholic Hospital Association of the United States and Canada, includes the following data:

In the U.S., Canada and Puerto Rico, there are 1,155 Catholic hospitals with 202,033 beds and 27,865 bassinets. Of these 1,050 are general short-term hospitals; 11 maternity; five pediatric and 13 other special short-term hospitals. In the special long-term hospital group 29 are chronic-convalescent; 20 psychiatric; 10 tuberculosis and two in other categories. The East North Central states (Ohio, Indiana, Illinois, Michigan, and Wisconsin) have the largest number of these hospitals.

Related health facilities in the U.S., and Puerto Rico are: homes for the aged 185; cancer seven; chronic-convalescent 90; maternity 6; clinics 9; visiting nurse 38; other facilities 14. In Canada there are 20 chronic-convalescent; 26 homes for the

continued on page 245

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THROUGH THE MICROSCOPE

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aged; two maternity; four visiting nurse, and one other category.

The 1961 directory also inaugurates reports of utilization of beds and bassinets in Catholic hospitals for 1960. On the average day in 1960 there were 105,217 patients in Catholic hospitals throughout the United States as reported by the 852 hospitals out of 868. There were almost five million admissions reported by these hospitals. It is interesting to note that 682 of the reporting hospitals recorded 1,712,360 Catholic admissions which represents 44 per cent of the patients admitted to those hospitals, and conversely 56 per cent were non-Catholic admissions.

The per cent of occupancy was 76 per cent which reflects the national occupancy rate for this type of hospital. The East North Central region reported the highest occupancy rate, while the lowest rate of occupancy was reported by the Pacific region. Seven hundred and eighty-five of the hospitals reported 876,913 births and an average daily census of 11,169 with a bassinet occupancy rate of 52 per cent. On the average day during 1960, 2,396 children were born in United States Catholic hospitals, as reflected in the records of reporting hospitals.

There are 62 practical nursing programs in operation in twenty-five states, the District of Columbia and Puerto Rico. In professional nursing there are 318 schools with pre-service programs; 36 schools with baccalaureate programs for registered nurses and six schools offering master's degree programs in a total of 387 institutions in the U.S. Nearly three fourths of the 318 schools are fully accredited by the National League for Nursing. Canada has 25 nursing assistant programs; 86 pre-service professional programs and five graduate nurse programs in a total of 108 institutions.

The number of religious on active duty in hospitals in the U.S., Canada and Puerto Rico is 18,804. Of this number 8,411 are registered nurses.

20 Million Dollars in Research Contracts Issued by NIH

The National Institutes of Health, the Public Health Service research center at Bethesda, Maryland, announced in March that 158 research contracts, totaling $20,301,718.30, were in effect as of December 31, 1960.

The contracts, made for specific research and development objectives, are with 114 organizations in 26 states, the District of Columbia, and five foreign countries—Denmark, Finland, Italy, Norway, and Mexico.

Doctor James A. Shannon, director of the National Institutes of Health, explained that use of the research contract mechanism is essential for research and development activities with limited, highly specific objectives which can best be performed outside the laboratories of NIH. Additionally, he said, the contracts frequently permit utilization of highly specialized technical skills, equipment, or data not otherwise available.

Mass-testing operations in search of new drugs for cancer treatment, establishment of pilot plants for large-scale production of drugs, and breeding and production of special strains of laboratory animals are among the projects supported by Public Health Service research contracts.

Computer Screens Electrocardiograms for Heart Abnormalities

A milestone in application of electronic data computing to medical diagnosis was reported last month by two Veterans Administration physicians.

Doctor David Littman, of the West Roxbury (Mass.) VA hospital and Harvard Medical School, together with Doctor Hubert V. Pipberger of Mt. Alto VA hospital, Washington, D.C., and Georgetown University School of Medicine, said a computer has screened electrocardiograms for heart abnormalities with an average of between 95 and 100 per cent accuracy in diagnostic decisions.

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concluded on next page



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readings by physicians because both electrocardiograms and vectorcardiograms were used for comparison. The computer can make a much more rapid and detailed study of the heart record than possible by visual analysis.

The computer indicated whether the heart records were normal but did not make a specific diagnosis of the sort of heart abnormality present.

The VA research is the first such program in which data collecting, data processing, and diagnostic decision are made entirely by technicians and machines. The physician needs to read and interpret, therefore, only those records which are recognized by the computer as being abnormal.

The research, a joint project of the VA and the National Bureau of Standards, has been under way since 1957.

Heart electrical output records of more than 2,500 VA patients have been recorded on magnetic tape and converted into numerical form for processing by a computer at the Bureau of Standards. Four other VA hospitals also are participating in the research.

Gov't Employee Plan: Pay More, Get More

Four out of every five persons covered by the health insurance plans offered under the huge Federal Employees Health Benefits Program have chosen to pay higher premiums for more benefits, the Health Insurance Institute reported recently.

The program, the largest and most complex voluntary health insurance plan in the world, got under way last July 1. At that time it was estimated that a total of four million persons, composed of 1.8 million Federal employees and their 2.2 million dependents, would enroll in the program.

However, analysis by the Institute of enrollment statistics released by the U.S. Civil Service Commission disclosed that actual enrollment exceeded the estimate by more than one million persons, reaching a total of 5.2 million persons, consisting of 1.7 million employees and their nearly 3.5 million dependents.

When the program went into effect, the two million employees of the Federal Government were offered a total of 36 health insurance plans with 56 options, which gave them the choice of paying higher premiums in return for greater benefits, or paying lower premiums and receiving smaller benefits.

High Option. Of the 5.2 million persons who enrolled, 4.1 million decided in favor of the high option, and 1.1 million selected the low option, said the Institute.

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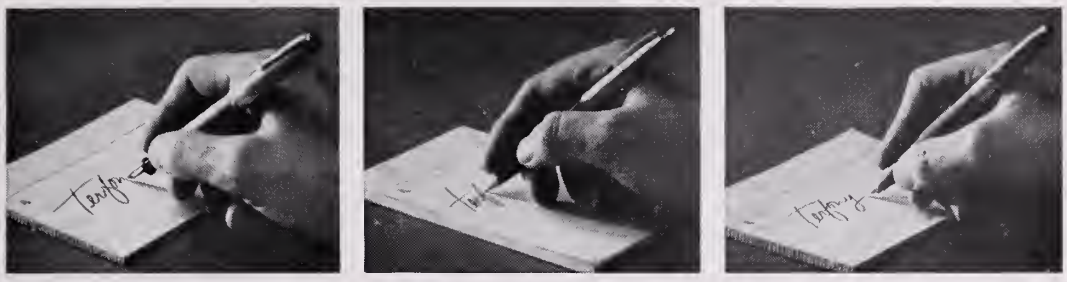
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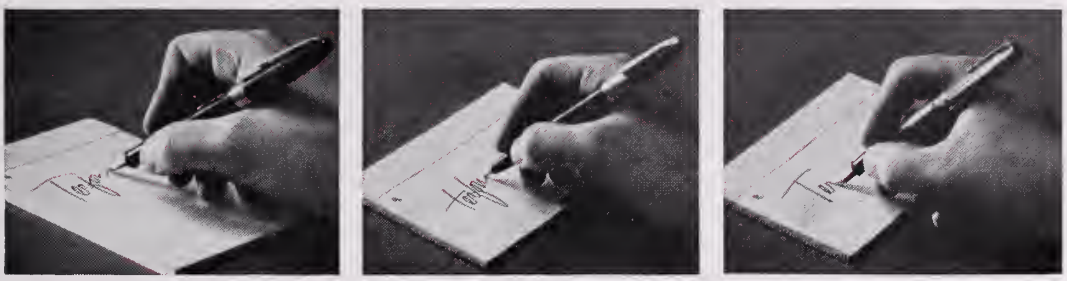
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EDUCATIONAL CAMPAIGN BEGUN: . . . "Medicine 1961" is the title of a series of newspaper announcements sponsored by Blue Cross and Physicians Service, beginning this month. The series will feature actual case histories of Rhode Islanders whose health has been restored, thanks to modern medical and hospital care. Theme of the announcements is: "Your Good Health is Worth the Cost of Medical Progress."

FEDERAL EMPLOYEE "SUPPLEMENTAL" NOW ADMINISTERED LOCALLY: Effective April 1, your Blue Cross and Physicians Service plans will administer and underwrite the "Supplemental" ("Major Medical") part of the Federal Employee health plan. Previously, claims for benefits were sent directly to Washington, D. C. under this part of the Federal Employee program. This change was made to provide better and faster service to subscribers and doctors in Rhode Island.

DOCTORS NAMED AS CLAIMS COMMITTEE CONSULTANTS: William C. Howrie, Jr., M.D., Vincent I. MacAndrew, M.D. and Louis A. Sage, M.D., have been named as consultants to the Physicians Service Claims Committee. They replace the following physicians: Edward Damarjian, Edward G. Crane, and Ernest K. Landsteiner.

There are 12 physicians who represent medical specialties and serve as consultants to the Claims Committee in reviewing Physicians Service claims requiring individual attention. A rotating plan is used, whereby doctors serving as consultants are changed periodically to provide as much opportunity as possible for physicians to understand the way Physicians Service claims are handled.

Other physicians serving as consultants are: Charles J. Ashworth, M.D., William J. Butler, M.D., Walter Dufresne, M.D., Charles L. Farrell, M.D., Banice Feinberg, M.D., Gary P. Paparo, M.D., Richard P. Sexton, M.D., Linus A. Sheehan, M.D., Harold W. Williams, M.D.

300,000 POLIO REMINDERS: More than 300,000 folders, reminding Rhode Islanders of the importance of getting polio shots, have been distributed by Blue Cross and Physicians Service through enrolled companies, pharmacies, doctors' offices, hospitals, etc.

TWO MILLION ADDED TO BLUE SHIELD: Official enrollment in the 74 approved Blue Shield Plans (which includes Physicians Service) totaled more than 47,000,000 persons by the end of 1960. This was an increase of 2,292,000 members over the previous year.

MAY, 1961

RHODE ISLAND

Medical Journal

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". . . JUST ANOTHER INSURANCE COMPANY . . ."

"Unfortunately, every now and then, a physician — sometimes even a Participating Physician — refers to his Blue Shield Plan as 'just another insurance company.' Frequently these references come from our colleagues, and they reflect a failure on the part of those doctors who are truly familiar with the facts to acquaint new physicians with the medico-economic history of the past twenty years and with the present day role of Blue Shield in continuing to answer medico-economic problems.

"Blue Shield differs radically from other prepayment or insurance plans — in its basic purposes, in its sponsorship, and in its organization." (D. Edward Watkins, M.D., Chairman of the Board, Virginia Blue Shield, Annual Report.)

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(1) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (2) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (3) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960. (4) Shaw, J. H., in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, ed. 2, Philadelphia, Lea & Febiger, 1960, pp. 558-601. (5) Campbell, D. G.: *ibid*, pp. 888-910. (6) Abbott, W., in Allison, J. B.: Ann. New York Acad. Sc. *69*:1018-1022 (Jan. 10) 1958.

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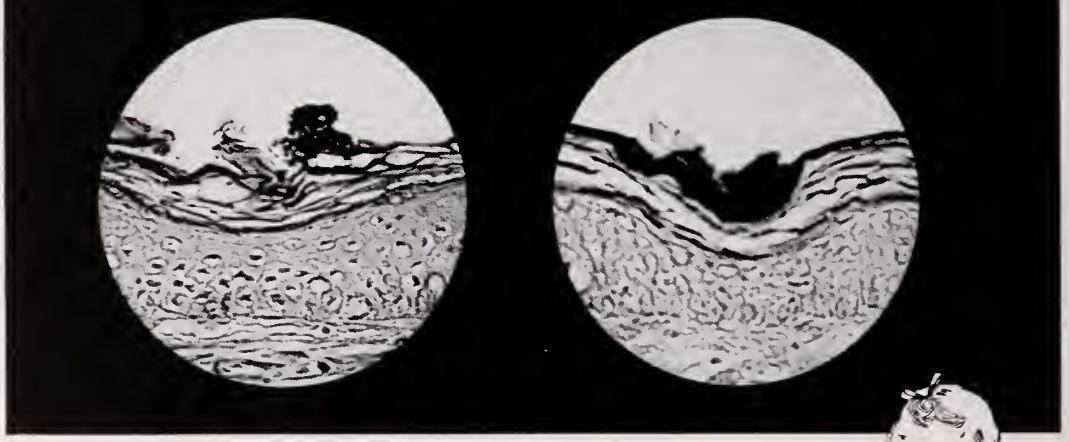
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1. Spoor, H. J.: New York St. J. M. 60:2863, 1960.
2. Wiese, H. F., et al.: J. Nutrition 66:345, 1958.
3. Smith, L. W., et al.: Amer. J. Med. Sc. 237:600, 1959.
4. Nutrition Reviews 17:136, 1959.

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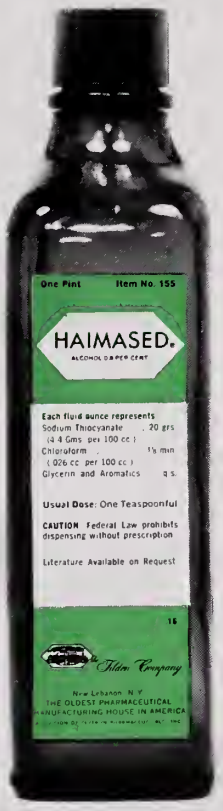
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References: 1. California Medicine, 80:375, 1954; 2. Peterson, D. M.: J. Missouri S.M.A., 40:279, 1943; 3. Lindberg, H. A., Treger, N. V., Barker, M. H.: Quarterly Bull., Northwestern Univ. Med. School, 22(1):59, 1948; 4. Davis, L.: Postgraduate Med., 9:321, 1951; 5. Goodman and Gilman, The Macmillan Co., New York, 1958.



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AN INSURANCE ACTUARY VIEWS THE NATION'S SOCIAL SECURITY PROGRAM

THE TRUTH about this country's social security program has been distorted and misrepresented to the American people and "important political and economic consequences" may result when the facts are ultimately understood, according to an insurance actuary writing in the April 8 issue of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

The article, titled *The Coming Din of Inequity*, was written by Ray M. Peterson, vice president and associate actuary of the Equitable Life Assurance Society of the United States.

Peterson declared that:

1. The public is being given the false impression that the method of financing the social security program possesses many of the unique characteristics of voluntary private insurance which the people have learned to value highly.

2. The program has been misrepresented as being a "time-tested" and "tried and proved" system of financing old-age benefits.

3. The people are being given the mistaken impression that social security benefits are paid out of accumulated reserves, similar to private insurance programs, when in truth the program is financed almost entirely on a pay-as-you-go basis with benefits paid out of current income.

Peterson noted that "a great national debate is now in progress as to the issue of providing medical care and hospital benefits under the Social Security System."

"That debate," he said, "can be pursued intelligently and wisely only if we understand the true nature and implications of the social security financing mechanism."

He said that a national old-age pension program can be financed on a pay-as-you-go basis, a full-reserve basis, or some combination of the two.

Full-reserve financing is a "prepaid system" in which benefits are fully paid for during the years before they are received, he said.

"Full-reserve financing in the field of private insurance is the test of actuarial soundness and it is the only concept of actuarial soundness with which the American people are generally familiar," Peterson said.

He pointed out that under private insurance, all money paid into the insurance fund together with all income from investment is sufficient to pay all promised or guaranteed benefits.

Pay-as-you-go, on the other hand, means that the government raises through current taxes just enough money to pay the cost of benefits currently due, he said.

"No reserve is accumulated, no element of prepayment is involved," he said. "Money is raised as and after payees become eligible to receive benefits. In this latter sense, 'pay-as-you-go' is really a post-paid system of financing."

He added that the fiscal soundness of a government program depends "mainly on the taxing power of the government."

Peterson declared that the 80 per cent of social security taxes paid for the old-age pension portion of the program (20 per cent going to survivor and disability benefits) would buy for new entrants 40 to 60 per cent more in old-age benefits under an insurance company group annuity program.

He pointed out that from 1956 through 1965, tax collections for the program will total $115.1 billion while benefits and expenses in that period will total $114.5 billion.

"These figures clearly show that we are now almost completely on a 'pay-as-you-go' or 'hope as you pay' basis," he said.

He said the true nature of social security financing is also "vividly reflected" by the gap between the value of benefits owed to current beneficiaries and the amount of money in the trust fund.

If taxes paid into the fund had been stopped by Congress last year, Peterson said, the $20.2 billion in the fund would have paid only 23 per cent of the $88.3 billion of obligations to current recipients.

And if tax contributions are cut off in 1965, he said, the estimated $23.1 billion which will be in the fund will pay only 20 per cent of the $114.2 billion of benefit indebtedness owed to the then current beneficiaries.

There would be nothing left over for the millions who had paid taxes to the program but had not yet qualified for benefits, he said.

Peterson stressed also that young workers and those who enter the labor market in the future, together with their employers, will pay more in taxes than the workers will receive in benefits

because they must bear a growing burden of indebtedness. This indebtedness arises, he said, from the fact that most present workers and those now receiving payments will have contributed, together with their employers, a great deal less than the actual obligations.

He said there is a "dawning realization" that Americans have but one choice — to pay interest on this debt "forever" since the only way to reduce the debt is for a given generation to build up a huge reserve over and above present payments solely to meet program obligations. "To expect this to happen is to be politically and economically unrealistic," Peterson said.

He said the debt arising from these unearned benefits has climbed from $150 billion in 1952 to about $300 billion under the existing program. It will rise even higher, he said, if Congress adds to the program without a tax increase high enough, as to present workers, to meet the additional cost.

Peterson quoted several public figures who have likened social security to prepaid private insurance. These include President (then Senator) Kennedy who had called social security a system of paid up insurance and a way of saving money for old age so the elderly won't be a burden to their children.

He said there "is no foundation for these inaccurate parallels" with private insurance.

"Indeed, there is desperate need to dispel these self-mesmerizing, foggy concepts," Peterson said.

He pointed out also that "with no reserve fund in sight to reduce the debt" created under the social security program, "the burden being passed on to future generations is permanent. It is not something that will somehow work itself out, or go away; it is not an actuarial fantasy."

Peterson said that adding medical care to the Social Security System for the present aged would alter the original concept that each person must contribute for a minimum period of time before he is entitled to benefits.

Furthermore, he said, under the Administration social security program, or similar proposals, medical care would add between $20 and $30 billion to "the permanent social security debt on which future generations and their employers would need to pay interest forever."

Peterson said the main purpose of his article was to "show that there are excellent reasons for grave concern as to the probable ultimate effects of continued distortion and misrepresentation by interpreters of the Social Security Act, by statements of inadequately informed members of Congress and even by publications of the Social Security Administration itself."

Another purpose, he said, was to "set the record straight by portraying an accurate picture of the financing mechanism as now operating and by exposing the distortion and misrepresentation, no matter what its origin."

He said that when the American people finally learn that social security financing is "distinctly different" from voluntary private insurance with which it is compared, "a rude awakening may well occur, one which could have important political and economic consequences."

"Will the youngsters of the future protest what the oldsters of this generation have voted for themselves? During the decade ahead, will we oldsters, as we seek to enjoy our social security benefits, hear a rising clamor of unfairness — a din of inequity?"

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References:

1. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.
2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959.
3. Friedlaender, S., and Friedlaender, A. S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958.
4. Sherwood, H., and Cooke, R. A.: *J. Allergy* 28:97 (March) 1957.

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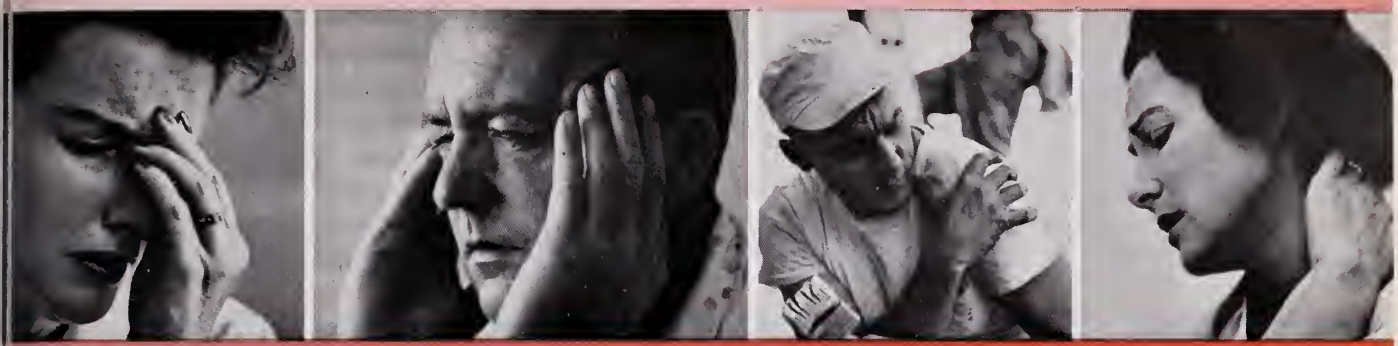
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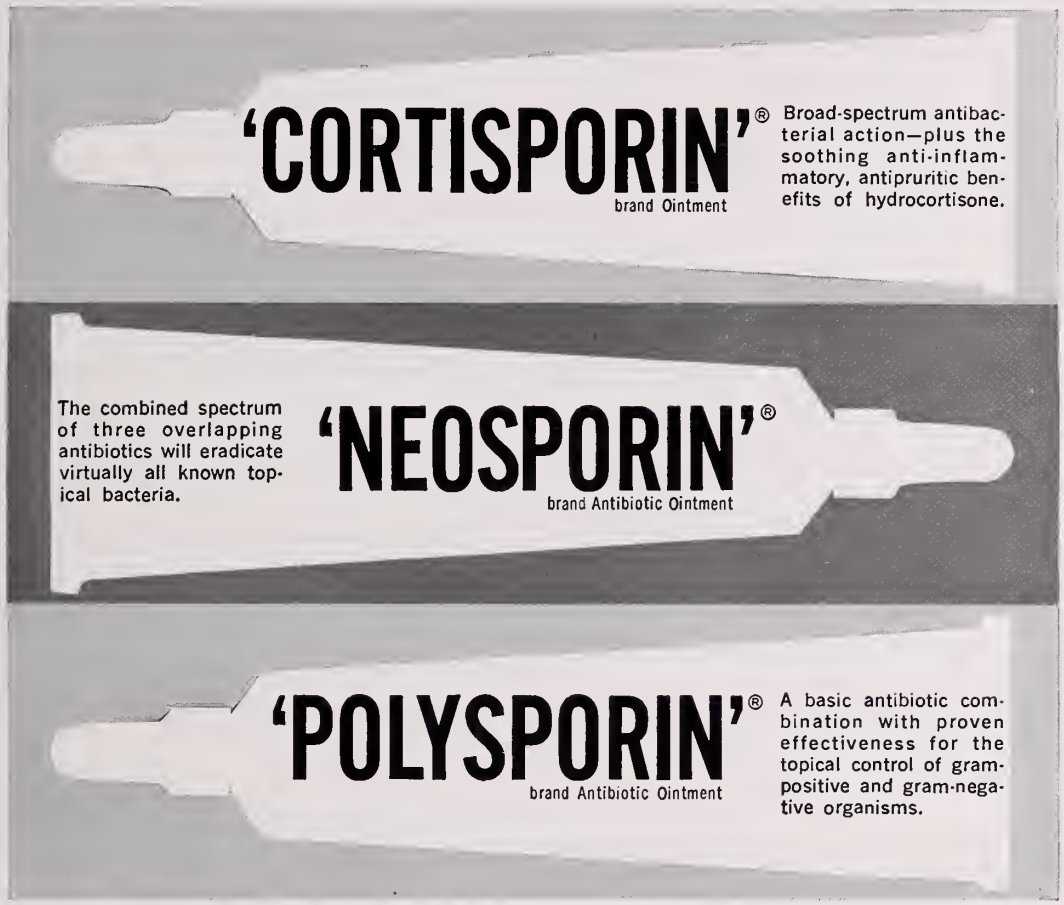
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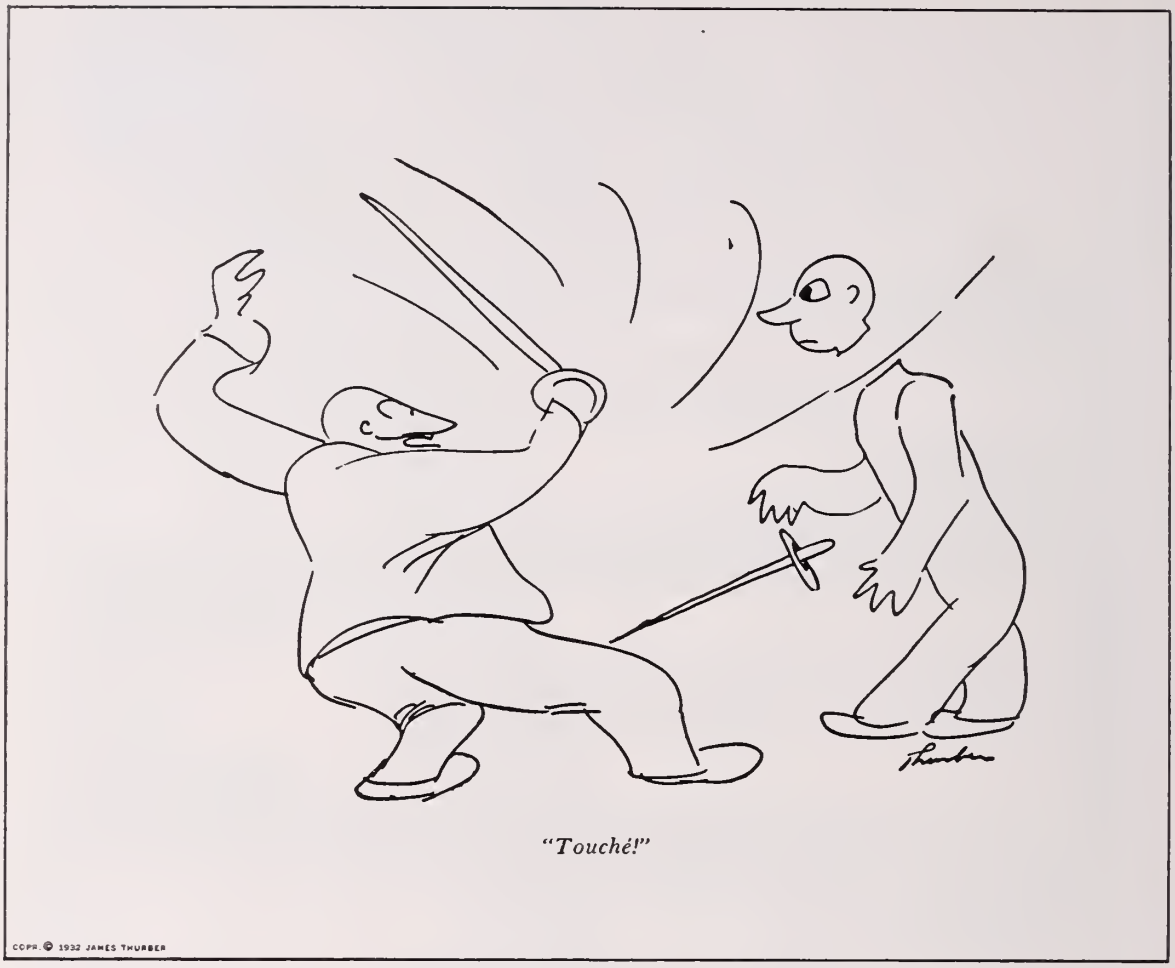
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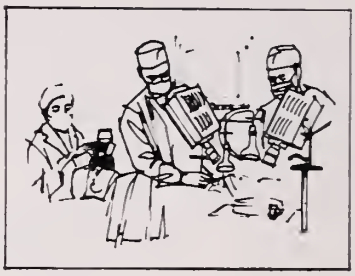
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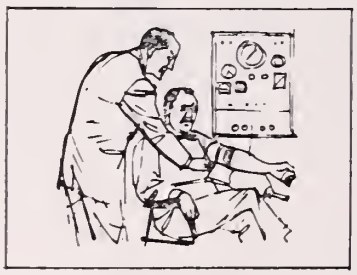
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SOME BIOCHEMICAL ASPECTS OF PSYCHIATRY*

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The Author. *Mark D. Altschule, M.D., of Waverley, Massachusetts. Assistant Clinical Professor of Medicine, Harvard Medical School; Director of Internal Medicine and Research in Clinical Physiology, McLean Hospital, Waverley; Editor-in-chief, Lippincott's* MEDICAL SCIENCE.

MOST OF THE DRUGS recently introduced for the treatment of mental and emotional disorders affect the metabolism or the activity of brain amines and their derivatives. Accordingly, it might be interesting to attempt to relate the clinical effects of the drugs to their actions on brain amines and on some of their derivatives.

The brain contains, among other things, (a) catecholamines such as norepinephrine, epinephrine, and dopamine; (b) serotonin and melatonin; (c) gamma-aminobutyric acid; (d) acetylcholine; (e) histamine; and (f) several small amines such as ethylamine and ethanolamine and also the piperazines (Figure 1). The specific functions of the various larger amines are only vaguely understood; these functions are believed to involve transmission of the nerve impulse. However, only in the case of acetylcholine is the role of the amine fairly well established; acetylcholine appears to play an important part in synaptic transmission. It is not surprising, therefore, that drugs that inhibit acetylcholine[1] and also those that increase its concentration by inhibiting cholinesterase[2,3] induce psychotic behavior in both animals and man. These apparently discordant observations are not really so; they suggest that either too much or too little of the neurohumors in the brain may give rise to manifestations of what has been poorly named "mental disease." The clinical significance of these experimental data is well known; psychiatric symptoms are among the toxic effects of such drugs as atropine. The fact that reserpine increases the acetylcholine content of most parts of the brain[4] cannot at the moment be related to any clinical change that the drug produces, and consequently it is ignored by most workers who are interested in establishing one theory or another.

The finding of catecholamines in the brain has stimulated much interest. Relatively large amounts of dopamine — the precursor of epinephrine and norepinephrine — are found, but this amine is generally regarded as having little pharmacologic activity. The other two, epinephrine and norepinephrine, are more interesting for several reasons: (a) giving these substances intravenously in small doses produces anxiety, the onset of which is accompanied by electroencephalographic evidence of activation of the reticular activating system;[5] (b) the reticular activating system contains considerable amounts of catecholamines, and injecting epinephrine strongly stimulates the reticular activating system,[6] which regulates awareness, among other things; (c) some derivatives of epinephrine produce depersonalization, delusions, and hallucinations when injected. Accordingly, the effects of various drugs on catecholamine distribution and metabolism may have some bearing on the manner in which these drugs produce their clinical effects.

Tranquilizing Drugs in Neurosis

Depletion of body stores of catecholamines. Drugs of the reserpine group deplete the brain[7,8,9,10,11] and the adrenal medulla[7,8,12] of catecholamines. Depletion of the brain's catecholamines may be expected to diminish the hyperawareness that characterizes many neurotic patients. In addition, the fact that reserpine and related drugs deplete the adrenal medullary stores of epinephrine suggests that patients who are under the influence of these drugs might respond to physical and emotional stresses by pouring out less than the usual amount of catecholamines, and might thereby experience less anxiety than previously. It should be noted that during the period in which catecholamines stores are being depleted, the blood epinephrine concentration is greatly elevated;[13] accordingly, an increase of some psychiatric symptoms may occur initially. This temporary exacerbation has actually been observed clinically.

continued on next page

*Presented at a meeting of the Providence Medical Association held at the Rhode Island Medical Society Library, Providence, Rhode Island, November 7, 1960.

These data on anxiety have nothing to do with the possible role of catecholamines with respect to mood; this is discussed below.

Chelation of catecholamines. The phenothiazines, in common with other sulfur-containing organic compounds, apparently chelate catecholamines. The hypotension that the phenothiazines produce when given in large amounts is probably due to this phenomenon. Meprobamate also produces hypotension when given in excessively large doses; its structure includes two NH_2-C^1=O groups that may likewise chelate epinephrine. The chelation of catecholamines might be just as useful a change as the depletion of body stores of these amines that was discussed above.

Accelerated destruction of epinephrine. Three drugs that are used in the treatment of psychiatric disorders accelerate the destruction of epinephrine; these are chlorpromazine, reserpine, and imipramine.[14] The anxiety-allaying actions of the first two might be potentiated by this phenomenon. However, it is difficult to understand how the phenomenon might contribute to the effects of imipramine.

Depression of the reticular activating system. Available data indicate that the tranquilizing drugs depress the reticular activating system. It is not clear whether this is owing to their effects on brain catecholamine concentrations or to some other action. At any rate, this effect should cause sedation and a diminution of the hyperawareness that is so troublesome in neurotic patients.

Depression of conditioned responses. The tranquilizing drugs prevent the formation or the carrying out of conditioned responses.[15,16,17,18] Unfortunately, the possible significance of conditioned responses in psychiatry has been almost completely ignored; therefore no statement can be made about this effect of tranquilizer drugs.

Some authors have attempted to relate the sedative effect (not the anxiety-allaying effect) of reserpine to the fact that it depletes brain catecholamine levels.[39] However there is no absolute correlation between the levels of brain catecholamines and the occurrence of sedation.[40] On the other hand, it is possible that some tranquilizing drugs — that is, the phenothiazines, which do not deplete the brain of catecholamines — may nevertheless block their action.[41]

In general, the known effects of the three main groups of tranquilizing drugs indicate that the compounds should be useful in moderating the feeling of anxiety and the hyperawareness found in neurotic patients. However, it is well known that allaying these symptoms in patients with severe neurosis does not significantly improve the general clinical status. (It might be pointed out parenthetically that the expectation that any anxiety-allaying drug will cure neurosis is based on a misconception of the nature of neurosis;[19] this misconception is based on the uncritical acceptance of Freud's unsubstantiated opinions about the disorder.) Accordingly, relying on these drugs alone to treat neurosis is certain to lead to disappointment in many cases.

Serotonin has been the object of much discussion, even though little is known about its functions in mammalian physiology. It is known, however, that reserpine and related compounds cause a decrease in the amount of serotonin in the brain.[8,9,11,20,21] Some authors have attempted to relate the sedative action of the reserpine group of tranquilizing drugs to this phenomenon. However, it now appears that the decrease in brain serotonin concentration follows rather than precedes the onset of sedation.[11] Moreover, in some types of experiment an increase of brain serotonin content is accompanied by sedation.[22] The data indicate that changes in brain serotonin levels cannot account for the sedative effects of reserpine. The role of serotonin in neurophysiology is still a mystery.

The fact that large amounts of histamine are found in the midbrain provides another mystery; its function in that area is completely unknown. The facts that some phenothiazines have antihistaminic effects and that reserpine depletes body stores of histamine[23] merely serve to tantalize the neurophysiologist, who is left with the conviction that there must be some meaning in all these observations — a meaning that so far has eluded detection.

Effects of Tranquilizing Drugs in Schizophrenia

Phenothiazines and the reserpine group of compounds have proved useful in the treatment of schizophrenia. About 15 or 20 per cent of patients with the chronic disease show enough improvement when given these drugs to be able to do without hospitalization. Schizophrenia is a disease in which certain disorders of indole metabolism occur, with resultant accumulation in the body of some substances known to cause depersonalization, delusions, and hallucinations and of other substances suspected of having these effects.

Aminochromes. Certain indoles that can be made either from catecholamines or from their precursors (Figure 2) accumulate in the blood of schizophrenic patients.[24] They are called aminochromes because they are colored: adrenochrome, which is brown; adrenolutin, which is yellow; etc. Spoiled epinephrine turns yellowish-brown and acquires hallucinogenic properties.[25] The exact source of the aminochromes in schizophrenia is not known, nor is the precise mechanism that leads to their formation in this disease. One hypothesis concerning the favorable effect of reserpine in schizophrenia is that the drug, because it is an indole (Figure 3), becomes

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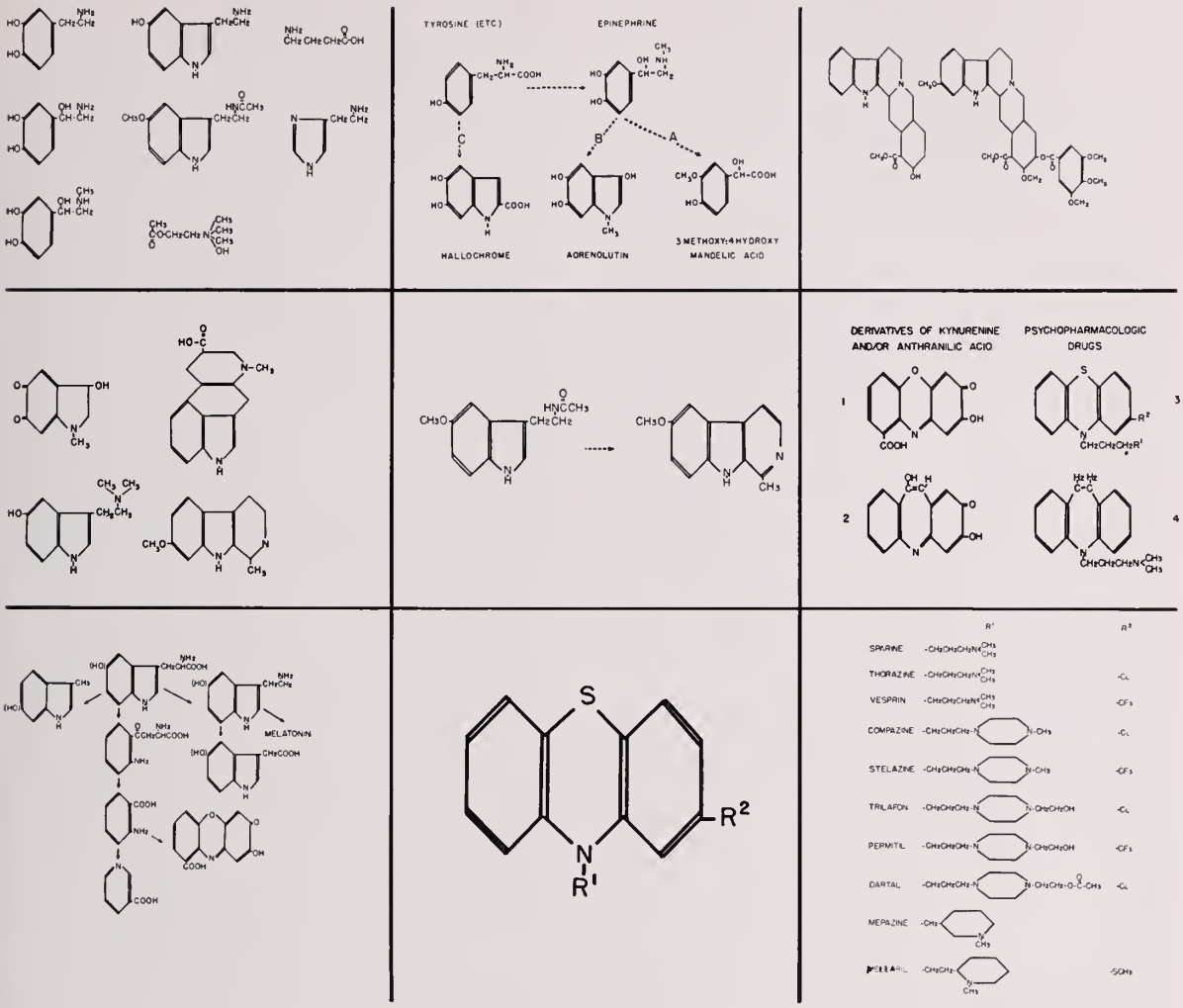


FIGURE 1

Upper left. Some amines found in brain. At the left, from top to bottom, are dopamine, norepinephrine and epinephrine. In the center are serotonin, melatonin and acetylcholine. At the right are gamma-aminobutyric acid and histamine.

FIGURE 2

Upper center. Aminochromes may be derived either from epinephrine (adrenolutin, etc.) or from epinephrine-precursors (hallochrome, etc.).

FIGURE 3

Upper right. Reserpine at the right is an indole related to yohimbine at the left.

FIGURE 4

Middle left. Some indoles currently under investigation. At the left are adrenochrome above and bufotenine below. At the right are lysergic acid above and harmine below. Adrenochrome is a saturated indole and is not hallucinogenic. The other three are unsaturated and are hallucinogenic.

FIGURE 5

Middle center. Transformation of melatonin to a harmine-like compound.

FIGURE 6

Middle right. Similarities between ommochromes at the left and, at the right, phenothiazines (above) and imipramine (below).

FIGURE 7

Lower left. Metabolism of tryptophane. The kynurenine pathway in the center ordinarily leads through anthranilic acid to nicotinic acid. However, as shown by the dotted arrow which veers to the right, ommochromes might possibly be formed also.

FIGURE 8

Lower center. (A) The phenothiazine nucleus.
Lower right. (B) The side-chains in various drugs.

SOME BIOCHEMICAL ASPECTS OF PSYCHIATRY

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bound to certain sites on brain proteins, thereby preventing the attachment of indoles such as aminochromes that might poison enzymes. This concept is purely speculative, and there is no evidence for (or against) it at present.

Harmine-Indoles. Harmine is known to be one of the hallucinogenic indoles (Figure 4). McIsaacs has recently suggested that one of the neurohumors, melatonin, might be changed to a harmine-like indole (Figure 5). This transformation is easily accomplished *in vitro* but has not yet been demonstrated *in vivo*. Reserpine consists of a harmine-like nucleus to which other groups are attached (Figure 3). It is therefore possible that the above-described speculative explanation of the action of reserpine in counteracting the effects of aminochromes might also apply to any harmine-like derivatives of melatonin formed in the body.

Ommochromes. Ehrensvard[27] recently called attention to the similarities of structure between certain derivatives of tryptophane and some drugs used in psychiatric practice (Figure 6). The occurrence of these so-called "ommochromes" has not yet been shown in schizophrenia; accordingly, any discussion of their role in this disease must be speculative. A large proportion of ingested tryptophane is oxidized to kynurenine, then to anthranilic acid, and then to nicotinic acid (Figure 7). However, the ability to oxidize anthranilic acid appears to be impaired in schizophrenia.[27] Under certain circumstances the accumulation of anthranilic acid leads to the conjugation of this compound to form ommochromes (Figure 7). If this does happen in schizophrenia, administered phenothiazines would preempt sites on brain proteins that might otherwise be occupied by ommochromes. The commercially available phenothiazines all have a central nucleus that resembles an ommochrome except that phenothiazines contain sulfur at the place in the molecule where ommochromes contain oxygen (Figure 5); the various phenothiazines on the market differ only with respect to their side-chains (Figure 8).

Of the various abnormal nitrogenous compounds believed to accumulate in the blood of schizophrenic patients, only the aminochromes have actually been shown to occur; the presence of harmine-like indoles and of ommochromes has yet to be demonstrated.

Brain Amines and the Mood

Some years ago the observation was made that apathetic tuberculous patients given isoniazid became less apathetic. This observation led to studies of the effects of iproniazid (Marsalid) and the subsequent development of a number of chemically-related compounds called "psychic energizers." (The idea that there is any such thing as "psychic energy" seems to have originated in the brain of the well-known German psychologist Herbart a century and a half ago; Freud borrowed the idea — neglecting, as usual, to acknowledge its source — and its present popularity is owing largely to Freud's writings.) All the currently used so-called psychic energizers except one are hydrazines; that is, they contain a –N–N– group. The one exception is imipramine (Tofranil) (Figure 6). Iproniazid and similar compounds inhibit the enzyme monoamine oxidase and thereby interfere with the oxidation of epinephrine and norepinephrine and also of serotonin. Inhibiting the action of the enzyme leads to a considerable increase of brain serotonin.[22,28,29,30] Some authors have attempted to relate the so-called "psychic-energizing" effects of the drugs here discussed to this change, but this concept is negated by the fact that at least one type of monoamine-oxidase inhibitor causes sedation even though it increases brain serotonin concentration.[22]

Other authors have attempted to relate the so-called "psychic-energizing" effects of the hydrazine drugs to accumulation of catecholamines in the brain. However, the first step in the destruction of these amines is the attachment of a methyl group to form metanephrine and normetanephrine, compounds that are pharmacologically and psychologically inert. Therefore, although the so-called "psychic energizers" impair the oxidation of catecholamines,[31,32] they cause the accumulation of metanephrine and normetanephrine;[31,33] the amount of epinephrine that is excreted unchanged does not increase[34] and the effect of administered epinephrine is changed little if at all.[35,36,37] Moreover imipramine is not a monoamine-oxidase inhibitor, and it actually accelerates the destruction of epinephrine;[14] nevertheless, it is an excellent drug to use in depressions.

The available evidence therefore indicates that there is no relation between the monoamine-oxidase inhibiting effect of the so-called "psychic energizers" and their clinical effects. Iproniazid (Marsalid) is known to depress the action of diamine oxidase, the enzyme partly responsible for the metabolism of histamine,[35] but there is nothing to suggest that this explains the clinical effects of this drug. On the other hand, recent studies show that drugs of this type — that is, those that contain an –N–N– group — depress the synthesis of gamma-aminobutyric acid.[38] Gamma-aminobutyric acid is believed to act as an inhibitor of transmission of brain impulses; therefore this biochemical effect of these drugs may account for their clinical effects. However, it is evident that much remains to be done in this field. Nevertheless, it is also evident that referring to the drugs in this group as monoamine-oxidase inhibitors, although it is not inaccurate, is misleading with respect to the mechanism of their action.

Conclusions

Study of the pharmacologic and biochemical changes caused by various drugs used in the treatment of psychiatric symptoms provides information on which to base understanding of some of their clinical effects. For the most part, however, relations between biochemical changes and clinical effects are speculative; in some cases the currently assumed relations are based on erroneous interpretations of available data.

Bibliography

[1]Pfeiffer, C. C.; Murphree, H. B.; Jenney, E. H.; Robertson, M. G.; Randall, A. H., and Bryan, L.: Hallucinatory Effect in Man of Acetylcholine Inhibitors. Neurology 9:249, 1959

[2]Feldberg, W., and Sherwood, S. R.: Behaviour of Cats After Intraventricular Injections of Eserine and DFP. J. Physiol. 125:488, 1954

[3]Grob, D., and Harvey, J. C.: Effects in Man of the Anticholinesterase Compound Sarin (Isopropyl Methyl Phosphonofluoidate). J. Clin. Invest. 37:350, 1958

[4]Malhotra, C. L., and Pundlik, P. G.: The Effect of Reserpine on the Acetylcholine Content of Different Areas of the Central Nervous System of the Dog. Brit. J. Pharmacol. 14:46, 1959

[5]Wilson, W. P., and Parker, J. B., Jr.: Humoral Arousal Responses in Mental Disease. Dis. Nerv. System 18:272, 1957

[6]Rothballer, A. B.: Studies on Adrenaline-Sensitive Component of Reticular Activating System. Electroencephalog. & Clin. Neurophysiol. 8:603, 1956

[7]Holzbauer, M., and Vogt, M.: Depression by Reserpine of Noradrenaline Concentration in Hypothalamus of Cat. J. Neurochem. 1:8, 1956

[8]Brodie, B. B.; Olin, J. S.; Kuntzman, R. G., and Shore, P. A.: Possible Interrelationship between Release of Brain Norepinephrine and Serotonin by Reserpine. Science 125:1293, 1957

[9]Paasonen, M. K., and Dews, P. B.: Effects of Raunescine and Isoraunescine on Behaviour and on the 5-Hydroxytryptamine and Noradrenaline Contents of Brain. Brit. J. Pharmacol. 13:84, 1958

[10]Karki, N. T., and Paasonen, M. K.: Selective Depletion of Noradrenaline and 5-Hydroxytryptamine from Rat Brain and Intestine by Rauwolfia Alkaloids. J. Neurochem. 3:352, 1959

[11]Sheppard, H., and Zimmerman, J. H.: Reserpine and the Levels of Serotonin and Norepinephrine in the Brain. Nature 185:41, 1960

[12]Coupland, R. E.: The Catechol amine Content of the Adrenal Medulla of the Rat Following Reserpine-Induced Depletion. J. Endocr. 18:154, 1959

[13]Muscholl, E., and Vogt, M.: The Concentration of Adrenaline in the Plasma of Rabbits Treated with Reserpine. Brit. J. Pharmacol. 12:532, 1957

[14]Axelrod, J., and Tomchick, R.: Activation and Inhibition of Adrenaline Metabolism. Nature 184:2027, 1959

[15]Bower, W. H.; Altschule, M. D., and Cook, L.: Psychiatric Experience with Chlorpromazine. Am. Pract. & Digest Treat. 6:90, 1955

[16]Weiskrantz, L., and Wilson, W. A., Jr.: Effect of Reserpine on Learning and Performance. Science 123:1116, 1956

[17]Mason, J. W., and Brady, J. V.: Plasma 17-Hydroxycorticosteroid Changes Related to Reserpine Effects on Emotional Behavior. Science 124:983, 1956

[18]Smith, R. P.; Wagman, A. T.; Wagman, W.; Pfeiffer, C. C., and Riopelle, A. J.: Effects of Some Tranquilizing and Depressant Drugs on Conditioned Avoidance Behavior in Monkeys. J. Pharmacol. & Exper. Therap. 119:317, 1957

[19]Altschule, M. D.: Invalidity of the Diagnosis "Anxiety Neurosis." Notes on Curiosity and Boredom as Motivating Forces. New York J. Med. 59:3812, 1959

[20]Brodie, B. B.; Shore, P. A., and Pletscher, A.: Serotonin-Releasing Activity Limited to Rauwolfia Alkaloids with Tranquilizing Action. Science 123:992, 1956

[21]Pletscher, A.; Shore, P. A., and Brodie, B. B.: Serotonin as Mediator of Reserpine Action in Brain. J. Pharmacol. & Exper. Therap. 116:84, 1956

[22]Feldstein, A.; Hoagland, H., and Freeman, H.: Monoamine Oxidase, Psychoenergizers, and Tranquilizers. Science 130:500, 1959

[23]Waalkes, T. P., and Weissbach, H.: In Vivo Release of Histamine from Rabbit Blood by Reserpine. Proc. Soc. Exper. Biol. & Med. 93:394, 1956

[24]Bigelow, L. B.; Veech, R. L., and Altschule, M. D.: Nature — In press.

[25]Osmond, H., and Hoffer, A.: The Case of Mr. Kovish. J. Ment. Sc. 104:302, 1958

[26]McIsaac, W. M.: Postgraduate Medicine — In press.

[27]Ehrensvard, G.: Lecture at Tulane Univ. Med. Sch. January 8, 1960

[28]Corne, S. J., and Graham, J. D.: The Effect of Inhibition of Amine Oxidase in Vivo on Administered Adrenaline, Noradrenaline, Tryamine and Serotonin. J. Physiol. 135:339, 1957

[29]Shore, P. A., and Brodie, B. B.: LSD-like Effects Elicited by Reserpine in Rabbits Pretreated with Iproniazid. Proc. Soc. Exper. Biol. & Med. 94:433, 1957

[30]Shore, P. A.; Mead, J. A.; Kuntzman, R. G.; Spector, S., and Brodie, B. B.: On the Physiologic Significance of Monoamine Oxidase in Brain. Science 126:1053, 1957

[31]Kirshner, N.; Goodall, McC., and Rosen, L.: Effect of Iproniazid on the Metabolism of DL-Epinephrine-2-C^{14} in the Human. J. Pharmacol. & Exper. Therap. 127:1, 1959

[32]Goodall, McC.; Rosen, L., and Kirshner, N.: Catabolites of dl-adrenaline-2-C^{14} and Effect Thereon of a Marsilid. Fed. Proc. 17:56, 1958

[33]Axelrod, J.: Presence, Formation, and Metabolism of Normetanephrine in the Brain. Science 127:754, 1958

[34]Sjoerdsma, A.; Lovenberg, W.; Oates, J. A.; Crout, J. R., and Udenfriend, S.: Alterations in the Pattern of Amine Excretion in Man Produced by a Monoamine Oxidase Inhibitor. Science 30:225, 1959

[35]Griesemer, E. C.; Barsky, J.; Dragstedt, C. A.; Wells, J. A., and Zeller, E. A.: Potentiating Effect of Iproniazid on Pharmacological Action of Sympathomimetic Amines. Proc. Soc. Exper. Biol. & Med. 84:699, 1953

[36]Axelrod, J., and Laroche, M. J.: Inhibitor of O-Methylation of Epinephrine and Norepinephrine in Vitro and in Vivo. Science 130:800, 1959

[37]Borowitz, J. L., and North, W. C.: Potentiation of Epinephrine and Norepinephrine by Iproniazid. Science 130:710, 1959

[38]McCormick, D. B.; Guirard, B. M., and Snell, E. E.: Comparative Inhibition of Pyridoxalkinase and Glutamic Acid Decarboxylase by Carbonyl Reagents. Proc. Soc. Exper. Biol. & Med. 104:554, 1960

[39]Pletscher, A.; Besendorf, H., and Grey, K. F.: Depression of Norepinephrine and 5-Hydroxytryptamine in the Brain by Benzoquinolizine Derivatives. Science 129:844, 1959

[40]Sulser, F., and Brodie, B. B.: Is Reserpine Tranquilization Linked to Change in Brain Serotonin or Brain Norepinephrine? Science 131:1440, 1960

[41]Shore, P. A.; Bogdonaski, D., and Brodie, B. B.: On Differences in Central Actions of Chlorpromazine and Reserpine. J. Pharmacol. & Exper. Therap. 119:183, 1957 (abstract article)

THE RELATIONSHIP BETWEEN BRONCHIOLITIS AND ASTHMA IN INFANCY

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BRONCHIOLITIS, also called capillary bronchitis and asthmatic bronchitis, is a common disease in infancy, especially in the first six months of life. It may be described as a respiratory infection, presumably of viral origin, usually occurring two or three days after the onset of a cold, and having symptoms of obstructive emphysema, such as wheezing and dyspnea. The pathology is that of bronchitis with, in some instances, areas of atelectasis and pneumonitis.

It is important to emphasize that in bronchiolitis there is obvious obstruction and difficulty in expiration, with wheezing and musical noises or rales in the chest. We are not discussing the respiratory infections of infants with pneumonia-like symptoms of rapid breathing, grunting, and high fever. Although there seems to be a tendency for those babies under six months of age with an asthmatic element in their constitution to have respiratory infections of an unrecognizable type, these cases are not under discussion.

We are advancing the thesis that the signs and symptoms of bronchiolitis are produced most frequently in babies having by inheritance a liability to asthma. A respiratory infection in such babies tends to cause edema and secretion in the smaller bronchi with resulting obstructive emphysema. The pathology of infectious asthma in older children as well as in infants is not well understood, but there seems to be a similarity between this and bronchiolitis. Probably the relationship of bronchiolitis and asthma in infancy often is not recognized in hospital practice, because the asthmatic baby is less often seen repeatedly in the hospital than he is in private practice.

Bronchiolitis and infectious asthma in infancy have characteristics in common. There is obstructive emphysema, usually a slight fever below 101°, and little or no leucocytosis. There is little obvious benefit from antibiotics; the attack tends to last two or three days with or without medication. Adrenalin gives some relief, but not very much, and the relief is transient. Before the age of six months, there is often respiratory difficulty without prolonged expiration and musical wheezing.

Literature

There are many reports in the medical writings that indicate a relationship between bronchiolitis and asthma. Many writers, especially in Europe, use the term asthmatic bronchitis instead of bronchiolitis. Bray[1] speaks of the acute bronchitic form of asthma in infancy. He states that in a large series of cases, including his own and those of other writers, it was found that in the asthma of children 23% of the cases begin before the age of one year, and 17% during the second year. These figures must include many patients that others would consider to be bronchiolitis or asthmatic bronchitis.

Köhler and Mai[2] in 1927 reported on the relationship between the spastic bronchitis of infancy and true bronchial asthma. They found that, of 86 infants with spastic bronchitis, 62% had a family history of asthma and "other disease of its kind." (Quotation from my translation.) A control group had a similar family history in only 22%. They also found that ten of these 86 infants were known to have developed true asthma later. Cooke[3] describes asthma and asthmatic bronchitis in infancy, and considers it infectious and due to infection alone.

Wittig and Glaser[4] have reported that in three Rochester hospitals over a period of seven years there were one hundred cases of bronchiolitis that could be followed; thirty-two of these patients were later found to have asthma. This last observation would seem to be conclusive evidence that there is some relationship between bronchiolitis and asthma at least in some cases.

Personal Experience

I have tried to explore this problem from the other end and find out what evidence there is of "bronchiolitis" preceding known cases of asthma. I have in my files the records of 144 babies whom I have seen before the age of two with asthma. These records were kept in the normal course of caring for these babies, and the description of a first attack or a preceding infection is often not as explicit as would be desirable for the purposes of this study.

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EXPERIENCES WITH HUMAN TUMOR VACCINES*

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FOR OVER FIFTY YEARS investigators dealing with the problems of cancer therapy have been intrigued with the possible application of immune mechanisms to the treatment of this group of diseases. Attempts to immunize an individual against his own tumor have been based on the hypothesis that a tumor is in some way antigenically different from the host and that host resistance can be increased against the specific tumor. It has been postulated that some of the apparent spontaneous remissions of far advanced cancers have been due to naturally developing increased host resistance. The currently popular concept of "biologic predeterminism" in relation to a specific cancer in a specific host is also in part based on the theory that each host reacts in a different way to a specific tumor and that the individual variations in tumor growth and spread are in part due to host resistance.

In August of 1959 Doctors Graham and Graham of the Roswell Park Memorial Institute in Buffalo, N.Y., reported a series of patients with far advanced cancer who had been treated with vaccines made from their own tumors.[1] The vaccine in each instance consisted essentially of a mixture of the patient's tumor in cellular suspension mixed with Freund's adjuvant. The addition of adjuvant in making the vaccine was based on laboratory studies which had shown that the immune response to a standard antigen was twenty times greater when the antigen was mixed with the adjuvant when compared to the antigen alone.[2] The series of patients reported by the Grahams consisted mostly of patients with far advanced gynecological cancers. It was their opinion that the vaccines might have had a beneficial effect in their series of patients, and that they possibly had an effect in potentiating the therapeutic effectiveness of radiation. They reported no serious complications to the use of the vaccine. Subsequent direct communication with Dr. Ruth Graham, and a visit to her laboratory were of much help in determining the proper method of making the vaccine. Since it was probable that vaccine therapy would have no untoward effect in seriously ill patients with very poor prognosis, and since the Grahams had indicated that the vaccine might have a potentiating effect on radiotherapy, it was concluded that it would be worth while to pursue a trial of vaccine therapy in patients with far advanced bronchiogenic carcinoma. We were encouraged to undertake this work by Dr. Ruth Graham, who felt that theoretically such patients could be benefited. The study here reported is based on a series of seventeen patients who were treated with autogenous tumor vaccines between September, 1959 and July, 1960. Of this group three patients were treated for carcinoma of the ovary. The remaining fourteen had far advanced bronchiogenic carcinoma.

The patients with carcinoma of the ovary will be discussed first. Of these three all had far advanced cancer with metastasis at the time the vaccine was given. Two of the patients had recurrent carcinoma and the tumor was obtained at a subsequent laparotomy. The first patient to receive vaccine had a recurrent far advanced carcinoma of the ovary eight years after the original diagnosis had been made. She had remained asymptomatic during this period. Vaccine was administered in August, 1959 and was followed by a course of X-ray therapy. This patient had extensive perirectal involvement with almost complete rectal obstruction due to tumor. Following administration of the vaccine it was possible to cancel plans which had been made for a colostomy since the tumor diminished in size sufficiently to relieve the obstruction. It is of interest that the tumor in the rectal area was outside the field of the X-ray therapy. The patient survived for over a year after the procedure was performed and died in August, 1960. In the second patient, far advanced ovarian carcinoma was established at laparotomy; in October, 1959 she was given vaccine therapy. This was followed by radioactive cobalt therapy. The patient expired eleven months later.

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*Presented at the First Annual Research Project Evening of Miriam Hospital, Providence, Rhode Island, April 17, 1961.

The third patient was found to have recurrent ovarian carcinoma at repeat laparotomy in November, 1959 one year after the original diagnosis. Vaccine was administered without additional X-ray therapy. This patient is still alive and apparently well without tumor recurrence fifteen months after administration of the vaccine.

The remaining fourteen cases all had far advanced lung carcinoma diagnosed at thoracotomy and confirmed by pathological report. In the majority of these patients the vaccine was made with the original tumor, while in a few metastatic supraclavicular lymph nodes were utilized as source of tumor material. Of the entire group of fourteen patients two expired in the hospital with complications which were attributable to the surgery. One patient, who received a vaccine made with what was felt to be an inadequate amount of tumor material obtained from a small supraclavicular node, expired less than one month after the administration of the vaccine. Of the eleven determinate cases three are living more than one year. All of these received postoperative radioactive cobalt therapy. Of the remaining group of patients four died within three months after the institution of therapy. Of these, one received additional radioactive cobalt therapy. Four lived for three to six months and of this group one received nitrogen mustard and three radioactive cobalt therapy. Although the results with this small group of patients appear far from striking it is worth noting that all of these patients had far advanced disease and all had a very poor prognosis at the time the vaccine was administered. Three of the carcinoma of the lung group survived for more than one year giving a survival rate of 27 per cent for the determinate group, and 21 per cent for the entire group. Of the ovarian carcinoma group one of three is living fifteen months after laparotomy and vaccine therapy. No untoward sequelae were encountered as a result of vaccine therapy, although in most patients sharply defined ulcerations developed on the anterior thighs at the side of administration. In no patient was tumor implant in the subcutaneous tissues encountered although cellular suspensions of tumor were injected. It is felt that the brisk local reaction including ulceration at the site of vaccine injection represents host response to the tumor, and it was considered to be an encouraging sign when such reactions appeared.

Conclusion

Although the results obtained with autogenous tumor vaccines have not been dramatic, it is felt that our experiences to date and those reported by other investigators warrant further trials with this material, particularly in combination with X-ray therapy.

Bibliography

[1]Graham, J. B., and Graham, R. N.: The Effect of Vaccine on Cancer Patients, Surg. Gynec. & Obst. 109:131, 1959

[2]Freund, J.; Thompson, G. E., and Lipton, N. M.: Aspermatogenesis, Anaphylaxis, and cutaneous sensitization induced in the guinea pig by homologous testicular extract, J. Exper. Med. 101:591, 1955

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Even so, at least thirty-one, or twenty-one per cent, of the babies had as their first symptom a respiratory infection, seven of these were sent to the hospital with this first attack, and seven more were diagnosed as pneumonia without any statement about hospitalization. This study is further complicated by the fact that most asthmatic attacks in infancy occur with an infection and most asthma in infancy seems to be of the infectious type. If careful histories are taken, it will in all probability be demonstrated that in infancy the first attack usually occurs with a severe respiratory infection. In my last six cases in which the history was taken with this study in mind, this was the case.

The asthmatic constitution in an individual varies in degree. At one extreme is the baby whose father and mother both had asthma, who has eczema and continuous asthma, and who has large positive skin tests including that to egg. At the other extreme is the baby with no allergy in the immediate family, with no eczema and no positive skin tests, whose constitution may be shown only by three or four attacks of infectious asthma. The characteristics of patients vary between these two extremes. Of my patients, about one-third had no signs of allergy except for the recurring attacks of wheezing. However, the recurring attacks of wheezing seemed to be exactly the same (except for severity) in the obviously allergic patients and in those with no other signs of allergy.

SUMMARY

It seems probable that a respiratory infection in a baby with an asthmatic tendency produces obstructive emphysema. So-called bronchiolitis is usually a manifestation of this process. This is of more than academic importance; if the physician is on guard to watch for beginning asthma, he can do something to help prevent the development of this serious condition.

References

[1]Bray, G. W., The asthmatic child, Arch. Dis. Childhood 5:237, 1930

[2]Köhler, B. and Mai, H. Über das Schicksal von Säuglingen mit spasticher Bronchitis, Ztschr. Kinderh. 61:481, 1939

[3]Cooke, R. A.: Allergy in Theory and Practice. W. B. Saunders Co., Phil., 1947

[4]Wittig, H. J. and Glaser, J., The relationship between bronchiolitis and childhood asthma; a follow-up study of 100 cases of bronchiolitis, J. Allergy 30:19, 1959

AN APPRAISAL OF INTRA-ARTICULAR PHENYLBUTAZONE

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THE EFFICACY of intra-articular hydrocortisone and its newer analogues in relieving active arthritis in individual joints is well known.[1] That this form of treatment has decided limitations is also recognized, e.g.: (1) The symptomatic relief may be transient, or of relatively short duration. (2) Refractoriness to the agent may develop, and activation of latent, or unrecognized tuberculous synovitis may develop.

This study was undertaken to determine if results comparable to steroid instillation could be obtained in (a) patients unresponsive, or refractory to the latter, and (b) untreated cases; and to determine any possible local or systemic side effects.

The material used was a 20% solution of phenylbutazone.* Amounts used were 2 cc. for paracentesis of the hip; 1½ cc. for other joints, except digital, where ½ cc. was used.

The type of arthritis previously documented by history, physical examination, X rays, and laboratory studies is indicated in Table 1. Twenty rheumatoid patients were treated, evenly divided as to sex. A total of twenty injections in this group were given. Twenty-five osteoarthritic patients were treated; in this group there were twenty-three females and two males. The average age in the rheumatoid group was 52.5 years male, and female 36.6 years. The case of longest duration was a female osteoarthritic of twenty years and the case of shortest duration was a female rheumatoid arthritic of eleven months. The oldest case was an eighty-year-old female and the youngest a seventeen-year-old male. In the osteoarthritic group the averages were 64.5 and 67.5 years respectively. One male gouty patient was treated.

The subjects of this study were outpatients of the Medical Arthritis Clinic of St. Joseph's Hospital, Providence, Rhode Island.

*Supplied by the Geigy Pharmaceutical Company of Ardsley, N.Y.

The severity of arthritis in a particular joint was graded as follows: (Grade 1) Bony changes by X rays, but only stiffness and aching after prolonged stress. (Grade 2) Moderate intermittent aching and swelling, occurring even at rest. (Grade 3) Active persistent inflammation and effusion, with increased temperature, but still functional ability. (Grade 4) "Red hot" joint, with severe inflammation, and little function.

TABLE 2
Total of Joints Injected

Knee	30
Hip	5
Ankle	1
Shoulder	5
Elbow	1
Interphalangeal	2
Wrist	2
	46

Only one injection in any joint was given.

Results

Improvement was graded on a percentage basis, in terms of relief of pain and improvement in heat, swelling, tenderness, and ability to use joint actively. Any improvement (25% or better) lasting twenty-four hours was considered significant. Only seven patients showed significant improvement. Four of these were rheumatoid; including two of the knee, one proximal interphalangeal, and one shoulder joint. The remaining three cases had osteoarthritis of the knee; two showed 25% improvement for two weeks; the third 50% improvement, lasting seven weeks. All of these cases were rated Grade 2 in severity.

No serious side effects were encountered. Three patients complained of slightly increased pain in the injected joint for twenty-four hours.

Discussion

This was a purely clinical study. No attempt was made to evaluate improvement or regression by means of serial synovial fluid analyses or X rays; nor were control medications or placebos used in improved cases. Improvement was assayed purely on patients' subjective response, increased range of motion, and physical examination of the involved joint as regards heat, swelling, and tenderness. It is of interest that in four of the cases improved by this treatment previous hydrocortisone injections had

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TABLE 1

(a) Females

Name	Type	Joint	Result	Previous Treatment	Comparison with Hydrocortone Injections
J. D.	R.A.	Knee	100% improvement	Steroids Salicylates	Better
E. C.	R.A.	Knee	No signif. change	Steroids Gold salts	Hydrocortone better
M. R.	R.A.	3rd Prox. interphal.	50% improv. in pain & motion for 5 wks.	Steroids Salicylates	No H. C. inj.
J. S.	R.A.	Hip	25% improv. in pain for 2 wks.	Steroids Physical therapy	H. C. better
C. R.	R.A.	Knee	10% improv. in pain for 2 wks.	Steroids Physical therapy	H. C. better
G. D.	Mixed	Knees	Questionable improvement	Steroids Physical therapy	Equivocal
R. V.	Mixed	Knees & shoulder	10% improv. in pain & stiffness	Steroids Salicylates	H. C. better
N. S.	Osteo.	Knees	25% improv. in pain, 15% in motion for 2 wks.	Salicylates	H. C. better
M. C.	Osteo.	Knee	No signif. change	No previous treatment	No H. C. inj.
F. S.	Osteo.	Knees	25% improv. in pain & motion for 2 wks.	Steroids Physical therapy	H. C. better
A. V.	Osteo.	Knees	No signif. change	Steroids Physical therapy	H. C. better
M. B.	Osteo.	Knee	No signif. change	Salicylates	H. C. better
M. Be.	Osteo.	Hip	No signif. change	None	Equal
M. P.	Osteo.	Hip	No signif. change	Salicylates	No H. C. inj.
M. A.	Osteo.	Knee	No signif. change	Salicylates	No H. C. inj.
M. Ab.	Osteo.	Knee	50% improv. in pain, 33% improv. in motion for 7 weeks	Steroids Salicylates	No H. C. inj.
M. O.	Osteo.	Elbow	No signif. change	Steroids	Equal
C. F.	Osteo.	Knee	No signif. change	None	No H. C. inj.
M. D.	Osteo.	Knee	No signif. change	None	No H. C. inj.
D. P.	Osteo.	Knee	No signif. change	None	No H. C. inj.

given at least as good relief, if not better. In view of this, and as similar contraindications for arthrocentesis exist for both drugs, it would seem that phenylbutazone has little practical advantage over hydrocortisone.

SUMMARY

Intra-articular phenylbutazone afforded significant improvement in seven patients of a total of forty-six. Three of these were osteoarthritics of long duration and of moderate severity. Four rheumatoid arthritics of moderate severity and long duration were benefited. No serious local or systemic side effects were noted.

REFERENCE

[1]Hollander, J. L.; Brown, E. M., Jr., and Jessar, R. A.: Intra-articular Hydrocortisone in the Management of Rheumatic Diseases. M. Clin. North America 38:349 (Mar.) 1954

TABLE 1

(b) Males

Name	Type	Joint	Result	Previous Treatment	Comparison with Hydrocortone Injections
F. W.	R.A.	Knees	75% improv. in pain for 6 hrs.	Steroids Gold salts	Equivocal
R. F.	R.A.	Knee	33% improv. in pain for 2 wks.	Steroids Gold salts	H. C. better
J. L.	R.A.	Wrist	10% improv. in pain for 1 week	Steroids Physical therapy	H. C. better
G. D.	R.A.	Shoulders	75% improv. in pain for 2 wks.	Colchicine	Better
J. S.	Osteo.	Terminal interph. finger	No signif. change	Physical therapy	H. C. better
E. R.	Gout	Knee	No signif. change	Steroids Physical therapy Colchicine	No H. C. inj.
S. D	Mixed	Ankle	No signif. change	Steroids	H. C. better

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PENNSYLVANIA ADJUDICATION ON BLUE SHIELD RATE INCREASES

On February 2, 1961, Honorable Francis R. Smith, Insurance Commissioner of the Commonwealth of Pennsylvania, handed down an adjudication on allowing certain increases in Blue Shield subscription rates.

In that same adjudication, the Insurance Commissioner stated that he was deferring action upon Blue Shield's request for increases in a number of the fees set forth in the Blue Shield fee schedule, and for the addition of various new benefits for that fee schedule. The Insurance Commissioner indicated, in this connection, that he desired additional data and information before taking action on these matters.

On February 2, 1961, the Insurance Commissioner disapproved a proposed Blue Shield Senior Citizens filing and in his adjudication disapproving such filing, made specific suggestions for the resubmission of this filing at the earliest practicable time.

THE FOLLOWING are excerpts from this adjudication:

Order of Insurance Commissioner

Accordingly, pursuant to the powers placed in me as Insurance Commissioner of Pennsylvania, under Section 12 of the Nonprofit Medical, Osteopathic and Dental Service Corporation Act, I hereby direct the Medical Service Association of Pennsylvania to undertake a study of its policies, contracts, fee schedules and powers, with the object of determining in what manner and in what specific respects it can legally take positive action to lessen any unnecessary utilization of Blue Shield benefits.

1. More specifically, I direct that it enter into discussions with the Pennsylvania Blue Cross Plans and representatives of the Medical Society of the State of Pennsylvania, and county medical societies for the purpose of determining wherein and in what manner Blue Shield can co-operate in the work now being performed by such agencies in endeavoring to lessen unnecessary hospital utilization, through review committees, admission committees and otherwise. Upon the conclusion of such conferences, Blue Shield can then submit to its legal counsel the proposed methods of co-operation to determine their specific legality under the law of this state. Such discussions and conferences in themselves which may bring about large areas of co-operation cannot, by any definition, be regarded as restrictive of a doctor's right to determine his own methods of diagnosis or treatment.

2. I further direct Blue Shield to initiate discussions with doctors and representatives of medical societies (and other interested groups) to determine in what manner the great amount of statistical records in the possession of Blue Shield, or which can be assembled by Blue Shield, can be used and made available to participating doctors for the purpose of casting light on any areas of possible over-utilization of Blue Shield benefits. In such discussions, consideration should be given to the establishment of a co-operative program designed to encourage doctors to lessen any such over-utilization of Blue Shield benefits. Any co-operative program developed through such discussions can be reviewed by Blue Shield's legal counsel to determine its legality under the applicable laws of this state.

3. I further direct Blue Shield to co-operate with state and local medical societies, hospital medical staffs, and other interested groups in encouraging the establishment of admissions committees in all Pennsylvania hospitals where Blue Shield subscribers may receive treatment.

4. I recommend that Blue Shield establish, as part of its internal organization, a utilization division with the function of carrying out the foregoing directives. In order to facilitate the establishment of this division and its effective operation, I hereby authorize Blue Shield to expend general reserve funds in a reasonable amount for this purpose.

5. I further direct Blue Shield to review its contractual provisions with subscribers and participating doctors and its fee schedules to determine whether or not modifications, deletions, or additions can be made which would tend to discourage any unnecessary utilization of Blue Shield benefits.

6. I also direct until further notice that Blue Shield submit to the Insurance Department quarterly reports, in written form, summarizing its activities under these directives.

Doctors' Fee Schedules

With respect to the fee revisions requested in this Filing, I shall therefore defer action pending additional substantiating data from Blue Shield.

In resubmitting any of these fee schedule revisions to me and in the submission of any revisions in the future, I recommend that Blue Shield consider the following factors in making such revisions and be prepared to demonstrate to the Insurance Department the effect of such factors upon each revision which it proposes:

1. Time and skills involved in the procedure being revised in relation to comparable procedures.

2. The average fees paid doctors in Pennsylvania for the procedure being revised and the average fees paid for comparable services in terms of time and skill.

3. The aggregate fees paid by Blue Shield to doctors for the procedure being revised and the number of doctors receiving such aggregate payment.

4. Comparable data relating to fees for similar services paid by public agencies such as the United States Veterans Administration to Pennsylvania doctors.

5. Data showing the aggregate instances where the revised fee will be in full payment for the procedure and data showing the aggregate instances where doctors will bill patients for additional amounts together with aggregate estimates of such additional billings.

6. The estimated average income (and basis of estimation) of the Blue Shield subscribers directly affected by such revised fee.

7. The submission of a formula, factor, or explanation showing to what extent the proposed fee is less than the average or reasonable fee for the same procedure which would properly be charged over income patients.

8. Such other data as will enable me to determine the reasonableness of such proposed revision.

The submission of future fee revisions to me on the foregoing basis will assist me in determining whether such proposed revisions should or should not be approved by me, as Insurance Commissioner.

A comprehensive review of all Blue Shield fee schedules taking into consideration the above factors is in order.

Blue Shield Benefits

In fulfilling my obligation to see that the objects and purposes of the Blue Shield Regulatory Act are being served, I request that Blue Shield consider the feasibility of extending full-service benefits to greater numbers of our citizens.

Testimony submitted at the hearing by Blue Shield representatives shows that existing fee schedules are adequate to cover 82% of doctors' normal charges. There was further testimony pointing to inaccuracies in the reporting of normal charges by doctors to Blue Shield which suggests that existing fee schedules cover substantially more than 82% of doctors' normal charges. In view of this fact, Blue Shield is directed to take appropriate steps to secure full and complete information in this regard and then determine whether the income limits for full-service benefits under both Plan A and Plan B could be raised without any further adjustment of fee schedules. (Underscoring added.)

Conversely, I direct that consideration be given to determine whether a totally revised fee schedule with generally lower fees reflected in lower subscription rates for full-service benefits can be developed for all citizens of Pennsylvania in the lower income groups without regard to their age. Efforts along this line would be in full keeping with the clear intent of the Legislature in permitting the creation of Blue Shield as a nonprofit public-purpose corporation primarily for the benefit of low-income citizens. The problem of paying for medical care is just as burdensome upon a person or family with low income whether the wage earner or his dependents are sixty-five years of age or under.

Society's general acceptance of the doctor's privilege to charge high income patients larger fees for a specific service is based upon society's expectation that doctors will charge low income patients a much lesser fee for the same service. The Insurance Commissioner, who represents the public, can properly inquire and, in fact, is obligated to inquire under the law, whether the Blue Shield rates paid by our low income citizens are providing doctors with fees which only persons with substantial incomes would normally be charged. (Underscoring added.)

H. L. MENCKEN'S PHILOLOGY TO BE REVISED BY DISCIPLE

One of the most widely acclaimed philologic works on American speech is the late H. L. Mencken's *The American Language*. The fourth edition of the work was produced in 1938, and despite two supplements it is now somewhat behind the times.

In order to keep the work a reference book on the current language, Raven I. McDavid, Jr., associate professor of English at the University of Chicago, is revising it and adding a third supplement.

Professor McDavid, who was in close communication with the Sage of Baltimore while he was alive, feels a rather strong obligation to maintain both the quality of Mencken's scholarship and his iconoclastic wit.

In his discussion of the term "Doc," Mencken stated that many of "the non-Hippocratic varieties of leechcraft" have "energetic lobbies seeking, with some success, full recognition as practitioners of healing on a par with orthodox M.D.'s" and that "in some localities 'Doc' is also used as an informal salutation to a stranger."

To these words McDavid adds "... especially one wearing glasses, who is thus distinguished from the unbespectacled stranger, usually addressed as 'Mac'."

Concerning the Ph.D. degree, Mencken wrote: "Even now it is seldom or never given for that congeries of quackeries which is promulgated in American universities, under the title of Education." To this McDavid adds: "Nor do English universities offer the subsaline Ed.D. (Doctor of Education) which schools of pedagogics dispense to their inmates too inept for a Ph.D., even in 'education'."

... Reprinted from MEDICAL TRIBUNE, March 13, 1961



SAMUEL ADELSON, M.D.

of Newport, Rhode Island

President of the Rhode Island Medical Society, 1961-1962

PRESIDENT'S MESSAGE

Almost one hundred and fifty years have elapsed since the physicians of Rhode Island joined together and formed the Rhode Island Medical Society. The purpose of the organization then was to enable the members to render better medical care to the people of this state and to promote medical progress among the doctors of this state. These aims and purposes are still maintained

Let us pause awhile, look back into the past and meditate on the many changes that have taken place in our profession. Our medical forebears did not have the advanced scientific knowledge, the tools, wonder drugs, hormones, antibiotics, etc. that the medical student now takes for granted.

However, they enjoyed the complete confidence of their patients. They possessed dignity, a deep devotion to humanity, and self-sacrificing dedication to their ideals. They were not hampered by unreasonable governmental restrictions and they distributed healing to all, rich and poor alike. The quality of medical care was good and no one was denied. Public relations was not thought of at all. No special effort was required to foster good feeling between doctor and patient.

Then the government stepped in. The bureaucrats in Washington and in state capitols decided that doctors should be told what kind of care to give and how it is to be distributed. Such interference by government or any other intermediary agency can greatly impair the quality of medical care that Americans are now getting.

In the recent Presidential election year the candidates for office vied with each other as to who could give away more of our natural resources, and they have even bartered away medical services for votes.

There are now in America about fourteen million people over sixty-five years of age. This was found to be a bonanza for votes and these older people were promised among other benefits, free hospital and medical care. The vast majority of these senior citizens have provided for their retirement years by exercising thrift and good management during their working years, by pensions, annuities, health insurance, such as Blue Cross and Blue Shield. They do not need and do not want handouts from the government. They wish to maintain their self-respect and dignity. Only a small percentage need help and this group is now adequately provided through existing agencies.

Medicine is a noble profession, a science and an art, developed through many years of study and practice. It has made greater strides in the past half-century than in all prior recorded history. It has increased longevity of man by about thirty years. It has conquered many dread diseases and it is now on the threshold of yet greater discoveries. All this was attained through private enterprise without government interference.

To maintain the high standard of medical care in America, I reiterate the plea made by Doctor Earl J. Mara one year ago: that you support the Rhode Island Medical Society and the American Medical Association in their stand against the socialization of medicine. These are your organizations. They deserve your wholehearted support for the benefit of the American people.

Samuel Adelson, m.d., *President*



FRANK I. MATTEO, M.D.
of Providence, Rhode Island
Vice President of the Rhode Island
Medical Society, 1961-1962

ARTHUR E. HARDY, M.D.
of Warwick, Rhode Island
President-elect of the Rhode Island
Medical Society, 1961-1962



Editorials

DOCTOR FRANK T. FULTON



On April 10, 1961 Doctor Frank T. Fulton died at the age of ninety-three. This date marks the end of the life of the man who, more than any other person, brought scientific medicine to Rhode Island. In the preface to Doctor Fulton's account of the establishment of the heart station at Rhode Island Hospital, Doctor Levine, says of him, "At Johns Hopkins he came under the influence of those celebrated medical figures, especially William Osler, who made that institution famous. The remarkable thing is that he succeeded in maintaining those high ideals that could more easily be retained in a teaching or university medical clinic, although he settled in Providence where there was no medical school. During the past half-century Doctor Fulton, probably more so than any other single person, has been responsible for the high level of medical practice and what is equally important, the high level of medical integrity that prevails in his community."

He introduced many firsts in the scientific study of patients in this state. The first privately owned electrocardiograph and the first instrument for estimation of the basal metabolic rate were his. By his early work in the systematic study of tuberculosis in factory workers, his studies in the clinical treatment of meningococcus meningitis and in many other applications of the most modern medical methods, he brought the benefits of the best medicine of the day to his community and his state. His observations on auricular flutter were the first published in America.

The establishment of the heart station at Rhode Island Hospital was, beyond a doubt, the accomplishment which gave him the most satisfaction. To this day it is recognized as one of the great training centers in cardiovascular disease.

As a most distinguished representative of Rhode Island medicine, Doctor Fulton received national recognition as a leader in his field. He was the first real internist to practice in Rhode Island and it is fair to say he was the greatest.

THE POLIO PUSH: THERE IS STILL TIME

As this issue reaches our readers time will almost have run out for effective poliomyelitis immunization for the 1961 season. Children who have not yet been immunized should have their series started at once. It is still not too late for those who have already had two, three, or four inoculations in past years to have another. A booster dose for everyone is highly desirable. This is mandatory for children, definitely indicated for those under forty, and of distinct value even for those in the older age groups. A strong campaign should be waged to get all preschool children polio vaccinated as this is the group that has in recent epidemics produced most of the cases, as strikingly exemplified in the Rhode Island epidemic of 1960.

Recent evidence indicates that current supplies of Salk vaccine are highly effective, and earlier deficiencies have been overcome. There is certainly no valid excuse for waiting for oral preparations.

Physicians, hospitals, public health officials, and newspapers should all get behind this final push. There is little time to lose.

I have had my shot; *have you had yours?*

"AN EXCITING TRAIL"

Published in this issue is an outstanding paper titled *Some Biochemical Aspects of Psychiatry* by Doctor Mark D. Altschule of Harvard Medical School, director of the Laboratory of Clinical Physiology at McLean Hospital in Waverley, Massachusetts. Doctor Altschule, a graduate of the Harvard Medical School, a thoroughly trained and experienced internist, and a clinical and laboratory inves-

continued on next page

tigator of considerable stature, has directed these disciplines and his not inconsiderable talents to researches in the hitherto esoteric realm of the psychiatrist. The paper is based upon one read before the Providence Medical Association. The note accompanying the paper upon its submission is a characteristic example of Doctor Altschule's succinct and pungent style: "Here at last is the paper. I believe that it is a better one than I actually delivered."

At an earlier meeting of the Association in January, 1959, (RHODE ISLAND MEDICAL JOURNAL 42:168, 1959) Doctor James A. Watt of the National Heart Institute of Bethesda presented a paper titled *The Pharmacological Revolution*, in which some of this same territory was covered. After discoursing upon some of the then recent advances in brain chemistry and pharmacology, he added: "This would suggest that the vistas opened up by the study of the chemistry of the brain are even vaster than we had believed. Just where this trail that we are now following toward a better understanding of how our minds, our brains, and our senses work might ultimately lead, I can only guess. But I can assure you that it will be an exciting trail to follow." This was most certainly an accurate forecast, as the current brilliant paper will confirm.

WHAT DO YOU BELONG TO?

BROWSING THROUGH a late issue of our distinguished contemporary, the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, we encountered these rather prosaic items: that the New Jersey Proctologic Society had elected its officers for the year 1960-1961, and that the New England Society of Anaesthesiologists planned to hold its annual business meeting at Steuben's Vienna Room, 114 Boyleston Street in Boston (the Athens of America). Reading on we learned that "No scientific program has been planned. Cocktails and dinner will follow the meeting." Then we took note of meetings of the Metropolitan New York Chapter of The American Medical Writers Association, and of The Boston Society for Gerontologic Psychiatry, Inc. In one and the same issue the New York Allergy Society and the International Society of Allergology (a rare mouthful) appeared to be competing for attention. The American Laryngological, Rhinology, and Otological Society, long familiar to its intimates by the cozy nickname of The Triological Society, announces a meeting to be held at the Lake Placid Club. The more simply titled, but self-consciously exclusive, American Surgical Society, announced its current conclave at the plush Boca Raton Club. Then there were announcements of the Aerospace Medical Association, and the Bockus Alumni International Society of Gastroenterology. The Society of American Bacteriologists it was reported had changed its name after sixty-one years of existence to the American Society of Microbiology, effective immediately.

The A.M.A., the fifty state societies (we note the proud listing of the Alaska State Medical Association at Sitka, May 24-27), and the major specialty groups, such as the American College of Surgeons, the American College of Physicians, the American Academy of Pediatrics, and the like, don't begin to encompass the hundreds of formally incorporated medical societies now vying for the doctor's time. Every issue of the J.A.M.A. lists close to three hundred meetings. Many of these organizations have colorful and exotic titles, such as the American Physicians Art Association, the Society for Investigative Dermatology, the Biologic Photographic Association, or the Academy of Psychosomatic Medicine, and there are such others as the International Conference on Medical Electronics, the American Academy of Forensic Sciences, the Southwestern Society of Nuclear Medicine, the Society of Biological Psychiatry, the American Society of Clinical Hypnosis, and the International Conference on Bio-Medical Electronics.

Certain groups seem to have a peculiar geographical slant, such as the Intermountain Pediatric Society, the Italian Society of Gastroenterology, the British Dietetic Association, and most charming of all, the Bahamas Serendipity Conference.

The spawning of societies goes on unabated. A recent issue (January) of the AMERICAN JOURNAL OF SURGERY was devoted to a Symposium on Colon Surgery comprising papers presented at the first annual meeting of the Association for Colon Surgery, held at Miami Beach in June, 1960. The introduction to this issue contained the following thoughts: "The idea for the formation of the new organization has found enthusiastic acceptance among surgeons throughout the country. . . . When a new society is formed there are always *a few persons* (italics ours) who believe that we already have enough societies. . . ." Apparently this defeatist attitude is frowned upon by the writers.

We do not feel impelled to make any profound editorial pronouncements on this subject. We have discovered, however, buried in the avalanche of meeting announcements, one which may be a faint portent of a change to simpler times. We should like to direct attention of our readers to the forthcoming meeting of the International Congress of Practical Medicine to be held in Grado, Italy, June 5-17.

WHERE DO WE GO FROM HERE?

Within a period of barely forty-eight hours, two hospitals in Providence, the Rhode Island and the Miriam hospitals, have staged research programs in which a total of twelve papers and eleven exhibits on research projects were presented. The scope of these papers was broad, ranging from such esoteric matters as chromosome counting to a new and successful stainless steel stapedial prosthesis designed, fabricated, and first used in this community. This considerable activity is a promising portent of the future.

Doctor Julian Johnson, John Rhea Barton Professor of Surgery at the University of Pennsylvania, remarked during his recent tenure as surgeon-in-chief *pro tempore* at the Rhode Island Hospital that he knew of no non-university hospital with a comparable academic environment, and further asked when Providence, with excellent university and hospital facilities, would have a medical school.

In posing this question he has joined a considerable list of eminent men, such as: Professor William Gammell of Brown University at the opening of Rhode Island Hospital (1868); Doctor Charles W. Parsons, son of Usher Parsons (1881); William Osler ("The money should be the least difficult thing to get in this plutocratic town," 1899); and not the least, Congressman John Fogarty (1960), who has exerted his not inconsiderable influence in federal medical affairs toward this end.

Perhaps before these words reach the light of day, the fateful step will at long last have been taken.

SOCIALISM AND MEDICAL CARE

Proponents of the proposal to provide federal medical aid to everyone over 65 receiving benefits under social security deny their program would be an opening wedge to socialized medicine. The Socialist party of the United States apparently thinks otherwise.

The Socialists favor complete socialization of medicine, as well as complete socialization of just about every facet of American life. They have just issued a pamphlet which describes a program for bringing about socialized medicine on a bit-by-bit basis. The first bit would be the social security concept of medical aid to the aged.

Norman Thomas, long the major voice of socialism in this country, has made clear the position of his party. He says the bill in question is "insufficient" and a "timid start." But he advocates its support, for reasons which should be obvious to anyone who knows the purpose of socialism—which, by the way, is the forerunner of communism. Mr. Thomas doubtless believes the Chinese proverb which holds the longest journey begins with a single step. And a program of socialization must also begin in a limited way. But the limitations will inevitably grow fewer and fewer as time wears on. If one group — arbitrarily chosen regardless of need — is to have its medical care bills paid for by the federal government, other groups will demand and receive the same handouts. So, little by little, socialized medicine will be brought about.

The Socialist party, its spokesman, Norman Thomas, and the rank and file of the membership have every right to their position. Those who disagree with the position taken by Thomas also have the right, and the obligation to fight Socialist proposals. This is not a matter of denying medical services to elderly persons whose own resources are inadequate. The federal-state co-operation measure passed by the last Congress provides for aid to all who need it, whether they are under social security or not. That is the proper way to meet the problem.

. . . Reprinted from the editorial page of the Pawtucket (Rhode Island) Times, Wednesday, April 12, 1961.

MINIMUM WAGE LEGISLATION AND THE HOSPITALS OF RHODE ISLAND

Legislation calling for a federal minimum wage of $1.15 an hour has passed the House of Representatives in Washington. We understand state legislation will follow the federal pattern. We heard at the New England Hospital Assembly that the Boston hospitals are seriously considering an overall personnel charter for their hospitals which includes a wage floor of $1.15. The question of whether hospitals in Rhode Island will be faced with at least a $1.15 minimum hardly seems worthy of recording. The only point for debate is the question of timing.

Assume passage of some kind of federal minimum legislation during this session of Congress.

concluded on next page

As all hospitals in Rhode Island are on a fiscal year beginning October 1, it may well be assumed that the impact of such federal minimum wage legislation would not be felt in this year's operation. It does mean, however, that such minimum wage legislation would have a full-year impact on the fiscal year we will all be entering October 1, 1961.

What does this mean in terms of hospital costs in Rhode Island? It means that, in addition to the anticipated 5% to 7% increase in cost that has accrued in recent years due to inflationary factors, coupled with rapid advances in medicine, we will have an additional *x* % increase because of this added payroll cost.

What does this mean in terms of government reimbursement for the care to welfare patients? It means that unless we take some intermediate action, hospitals will be absorbing the full impact of this additional minimum wage legislation for twenty-one months (until July 1, 1963) prior to its being reflected in the cost formula by which the state government reimburses hospitals for service to its accepted patients. With this in mind, should not the Hospital Association of Rhode Island consider a proposal to state government on a payment arrangement to hospitals of Rhode Island concurrent with a change in the federal minimum wage based upon Scovell Wellington and Company's latest cost study, plus an amount projected to cover whatever minimum wage increase is forthcoming from Congress, or a payment formula that would reimburse hospitals on a more current basis?

If such steps are not taken, all hospital income resources, other than government, including the paying patients, will be contributing a far greater share than is usual and proper to the care of welfare cases during this coming fiscal year.

. . . A guest editorial by LLOYD L. HUGHES, deputy director of Rhode Island Hospital, and Trustee, Hospital Association of Rhode Island, published in the Hospital Association's NEWSLETTER, April, 1961.

DISTRICT MEDICAL SOCIETY MEETINGS

NEWPORT COUNTY MEDICAL SOCIETY

THE FIRST MEETING of the year of the Newport County Medical Society took place on March 15, 1961 as a joint meeting of the Newport County Medical Society with the Naval Medical Officers of the Naval Hospital, and the Deslant Fleet, at 8:30 P.M., at the Officers' Club at the Newport Naval Base, with Doctor José M. Ramos, president, presiding.

This was the second meeting of these two medical groups, and it was felt that such an initiative had brought about not only a gratifying feeling of comradeship between civilian and naval medicine but had also sparked a feeling of unity between them which was considered primordial for their future undertakings.

The guests for the evening were: Doctor Joseph L. Yon, commanding officer of the Naval Hospital, as president of the Naval Hospital Staff; Doctor Earl Mara, president of the Rhode Island Medical Society; Captain James Collett, commanding officer, U.S. Naval Station, Newport; Doctor Ernest Joy, chief medical officer of Deslant; Doctor Charles S. Dotterer, liaison officer, between the Newport Hospital staff and the Naval Medical officers; Doctor Charles Smith, the Naval Station medical officer; Doctor Samuel Adelson, president-elect of the Rhode Island Medical Society; Captain William H. Snyder, dental officer, U.S. Naval Station, Newport; Doctor Donald B. Fletcher, vice-president of the Newport County Medical Society; and Captain Jesse Suiton, executive officer of the Naval Hospital.

The speaker of the evening was Professor William Dameshek of Tufts College, Medical School, who spoke on acute and chronic leukemias, from the point of view of both diagnosis and treatment.

The meeting adjourned at 11:45 P.M.

Respectfully submitted,

JOSÉ M. RAMOS, M.D., *President*

LEXICOGRAPHERS PLEASE COPY

Which is a sign of danger, "flammable" or "inflammable?"

Both. They mean capable of being easily ignited.

On the other hand, points out the World Health Organization, the language is full of opposites such as formal and informal, decent and indecent, capable and incapable.

That's why a meeting of the WHO recommends flammable with an opposite non-flammable.

Officers, 1961-1962 — THE RHODE ISLAND MEDICAL SOCIETY



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HOUSE OF DELEGATES

of the

RHODE ISLAND MEDICAL SOCIETY

Report of Meeting Held on April 19, 1961

A MEETING of the House of Delegates of the Rhode Island Medical Society was held at the Medical Library on Wednesday, April 19, 1961. The meeting was called to order by the president, Doctor Earl J. Mara, at 8:00 P.M. The following delegates were in attendance:

BRISTOL COUNTY: Robert W. Drew, M.D. *KENT COUNTY:* Edmund T. Hackman, M.D.; George L. Young, M.D. *NEWPORT COUNTY:* Philomen Ciarla, M.D. *PAWTUCKET DISTRICT:* Edward J. Butler, M.D.; Walter J. Dufresne, M.D.; Francis E. Hanley, M.D.; Robert C. Hayes, M.D., and Earl F. Kelly, M.D. *WASHINGTON COUNTY:* Hartford P. Gongaware, M.D. *WOONSOCKET DISTRICT:* Joseph A. Bliss, M.D.; Saul A. Wittes, M.D. *OFFICERS OF THE RIMS* (other than delegates): Earl J. Mara, M.D.; Samuel Adelson, M.D.; Arthur E. Hardy, M.D., and J. Murray Beardsley, M.D. *IMMEDIATE PAST PRESIDENT OF RIMS:* Alfred L. Potter, M.D. *PROVIDENCE MEDICAL ASSOCIATION:* Robert R. Baldridge, M.D.; John T. Barrett, M.D.; Irving A. Beck, M.D.; J. Robert Bowen, M.D.; Wilfred I. Carney, M.D.; Francis H. Chafee, M.D.; Harry E. Darrah, M.D.; Michael DiMaio, M.D.; William J. H. Fischer, Jr., M.D.; Henry B. Fletcher, M.D.; Warren Francis, M.D.; Frank Fratantuono, M.D.; J. Merrill Gibson, M.D.; John F. W. Gilman, M.D.; Seebert J. Goldowsky, M.D.; Stanley Grzebien, M.D.; John C. Ham, M.D.; Robert V. Lewis, M.D.; William J. MacDonald, M.D.; Frank I. Matteo, M.D.; Francis W. Nevitt, M.D.; Arnold Porter, M.D.; William A. Reid, M.D.; Ralph D. Richardson, M.D.; Jack Savran, M.D.; Carl S. Sawyer, M.D., and Stanley D. Simon, M.D.

The following delegates were absent:

KENT COUNTY: Peter C. Erinakes, M.D. *NEWPORT COUNTY:* Charles Dotterer, M.D. *WASHINGTON COUNTY:* Freeman B. Agnelli, M.D.; James A. McGrath, M.D. *WOONSOCKET DISTRICT:* Edward B. Medoff, M.D. *OFFICERS OF THE RIMS* (other than delegates): Frank W. Dimmitt, M.D. *STATE HEALTH DEPT. DIRECTOR:* Joseph E. Cannon, M.D.* *PROVIDENCE MEDICAL ASSOCIATION:* Bertram H. Buxton, Jr., M.D.; Waldo O. Hoey, M.D.; Walter S. Jones, M.D.; Frank C. MacCardell, M.D.; William S. Nerone, M.D., and John Turner II, M.D. *DELEGATE TO A.M.A.:* Charles J. Ashworth, M.D.*

Also present were: Doctor Alex M. Burgess, chairman of the Committee on Publications, Doctor Francis B. Sargent, chairman of the Committee on Medical Defense and Grievance, and John E. Farrell, SC.D., executive secretary of the Society.

*Without vote.

Doctor Robert C. Hayes, of Pawtucket, reported to the House that the Pawtucket Medical Association had elected as its delegates Doctors Edward J. Butler, Walter J. Dufresne, Francis E. Hanley, Robert C. Hayes, and Earl F. Kelly, but that official notice of their election had not been transmitted to the secretary of the Society.

ACTION: The motion was made, seconded, and adopted that the Pawtucket delegation be seated as delegates with the understanding that official notice of their election be subsequently received by the secretary from the Pawtucket Medical Association. The motion was seconded and adopted.

REPORT OF THE SECRETARY

Doctor Arthur E. Hardy read his report, copy of which was included in the handbook.

Doctor Arnold Porter briefly reviewed the plans for the Health Fair which is to be held in connection with the Sesquicentennial Celebration, and he reported on the anticipated expense for this project.

ACTION: The House of Delegates voted that the Society be empowered to assess up to $20 per member to provide funds to underwrite the cost of the Health Fair in connection with the Sesquicentennial, the assessment to be determined on the basis of funds necessary by the committee to finance the project. The motion was seconded and adopted.

* * *

The secretary reported that the A.M.A. had notified him that it had named Doctor Freeman B. Agnelli, of Westerly, as its key man for legislative liaison between the Society and the A.M.A.

* * *

ACTION: It was moved that the complete report of the secretary as presented be approved and placed on file. The motion was seconded and adopted.

PROPOSED BY-LAW CHANGE

The president noted that a proposed by-law change regarding the composition of the standing committee on Public Policy and Relations had been included in the handbook. Doctor Arnold Porter, chairman of the Committee, briefly reviewed the reasons for proposing this change.

ACTION: It was moved that the proposed by-law change be approved and submitted to the Society membership at the general meeting on May 3. The motion was seconded and was passed without dissenting vote.

* * *

The by-law amendment as approved is as follows: "SECTION 11. PUBLIC POLICY AND RELATIONS. — The Committee on Public Policy and Relations shall consist of five (5) members, of whom three shall be the president, the president-elect, and the secretary of the Rhode Island Medical Society, and two members elected by the House of Delegates. The Committee shall concern itself with all matters of public policy, public relations, and information relative to medicine and public health."

NOMINATIONS FOR OFFICERS AND STANDING COMMITTEES

The president noted that the nominations for officers and standing committees to serve for the fiscal year 1961-1962 were included in the handbook. He asked if there were any other nominations to be made by the House.

The nomination of Doctor Alex M. Burgess to be chairman of the Publications Committee, replacing Doctor Charles L. Farrell, was made and seconded.

A motion was made that the chairmanship of the Committee on Medical Economics be assigned to Doctor Stanley D. Simon. The motion was seconded and adopted.

A motion was made, seconded, and adopted that the list of nominations be closed.

* * *

ACTION: The motion was made that the slate of officers, with the exception of those as chairmen of the Committees on Publications and Medical Economics, be adopted. The motion was seconded and unanimously adopted, and the slate of officers was declared elected.

* * *

The president named Doctors Arnold Porter and William J. H. Fischer as tellers for the written ballot on the offices of chairman of the Committee on Publications and the chairman of the Committee on Medical Economics.

The tellers reported a majority vote of the House was for Doctor Alex M. Burgess as chairman of the Committee on Publications in place of Doctor Charles L. Farrell and Doctor Stanley D. Simon to be chairman of the Committee on Medical Economics.

In accordance with the vote of the House the president therefore declared Doctor Burgess as chairman of the Committee on Publications in place of Doctor Charles L. Farrell and Doctor Stanley D. Simon to be chairman of the Committee on Medical Economics.

REPORT OF THE SECRETARY

The secretary reported he had no communications to present nor resolutions from any district medical societies.

REPORTS OF COMMITTEES

Benevolence Fund

The report of the Benevolence Fund, as presented in the handbook of the delegates, was accepted and placed on file by a vote of the House.

Committee on Blood Banks

The secretary read a report of the Blood Banks Committee as submitted by Doctor Gary Paparo, its chairman. The report was accepted and placed on file by vote of the House.

Committee on Diabetes

The report of the Committee on Diabetes was accepted and placed on file by vote of the House.

Industrial Health

The report of the Committee on Industrial Health was accepted and placed on file by vote of the House.

Library

The report of the Library Committee was accepted and placed on file by vote of the House.

Maternal Health

The report of the Committee on Maternal Health as submitted in the handbook was discussed by members of the House.

ACTION: It was moved that the report of the Committee on Maternal Health be received and that the House request that the committee clarify the medical examiner situation relative to post-mortem examinations and that it inform the members of the Society of its clarification in a future report. The motion was seconded and adopted.

continued on next page

Medical Defense and Grievance

Doctor Francis B. Sargent reported that the Committee had received but one complaint necessitating investigation by the Grievance Committee in the past three months and that one suit for malpractice had come to trial with a verdict returned in favor of the physician.

The report as presented was approved by the House.

Committee on Medical Economics

Doctor Stanley D. Simon gave an oral report on the investment program for members of the Society which has been developed by the Committee on Medical Economics. He noted that the first day's returns to the Committee's inquiry had indicated an overwhelmingly favorable response to the proposal.

The report as presented was approved by the House.

Physicians Service

The president and several members of the House who serve as members of the Board of Directors of Physicians Service gave an informal report on recent developments of the Physicians Service program involving the extended benefits plan for federal employees.

Committee on Prevention and Treatment of Athletic Injuries

The report of the committee as submitted in the handbook was received and placed on file by a vote of the delegates.

Committee on Publications

Doctor Alex M. Burgess, chairman of the Committee on Publications, briefly reviewed the actions of the committee relative to several mechanical matters including the issuance of reprints, and he discussed what was considered to be the function of the committee. The report as submitted was approved by the House.

Public Laws

The report of the Committee on Public Laws was accepted and placed on file by vote of the House.

Public Policy and Relations

The report of the Committee on Public Policy and Relations was accepted and placed on file by vote of the House.

Science Fair

The report of the Science Fair Committee was accepted and placed on file by vote of the House.

Social Welfare

The report of the Social Welfare Committee was accepted and placed on file by vote of the House.

Trustees of the Medical Library

The report of the Trustees of the Medical Library was accepted and placed on file by vote of the House.

RESOLUTION FOR THE ESTABLISHMENT OF A PHYSICIANS SERVICE REVIEW COMMITTEE

Doctor Stanley D. Simon presented a resolution by which a permanent Physicians Service review committee would be established, and he explained the reasons for the introduction of this resolution. He moved its adoption.

The motion was not seconded.

FEE REVIEW COMMITTEE

Doctor Adelson discussed the interest of the House in the matter of review of the Physicians Service fee schedule periodically, and he moved that the Committee on Medical Economics of the Society consider feasible mechanisms for the establishment of a fee review committee and that it report to the House of Delegates its recommendations. The motion was seconded and adopted.

VOTE OF APPRECIATION

Doctor Earl F. Kelly, a delegate from Pawtucket and a past president of the Society, noted that the meeting was the last meeting of the House over which Doctor Mara would preside as president, and he called for a rising vote of thanks for Doctor Mara's outstanding service as presiding officer at the meetings throughout the fiscal year. The House applauded Doctor Mara with a standing vote of appreciation.

* * *

The meeting was adjourned at 9:40 P.M.

Respectfully submitted,

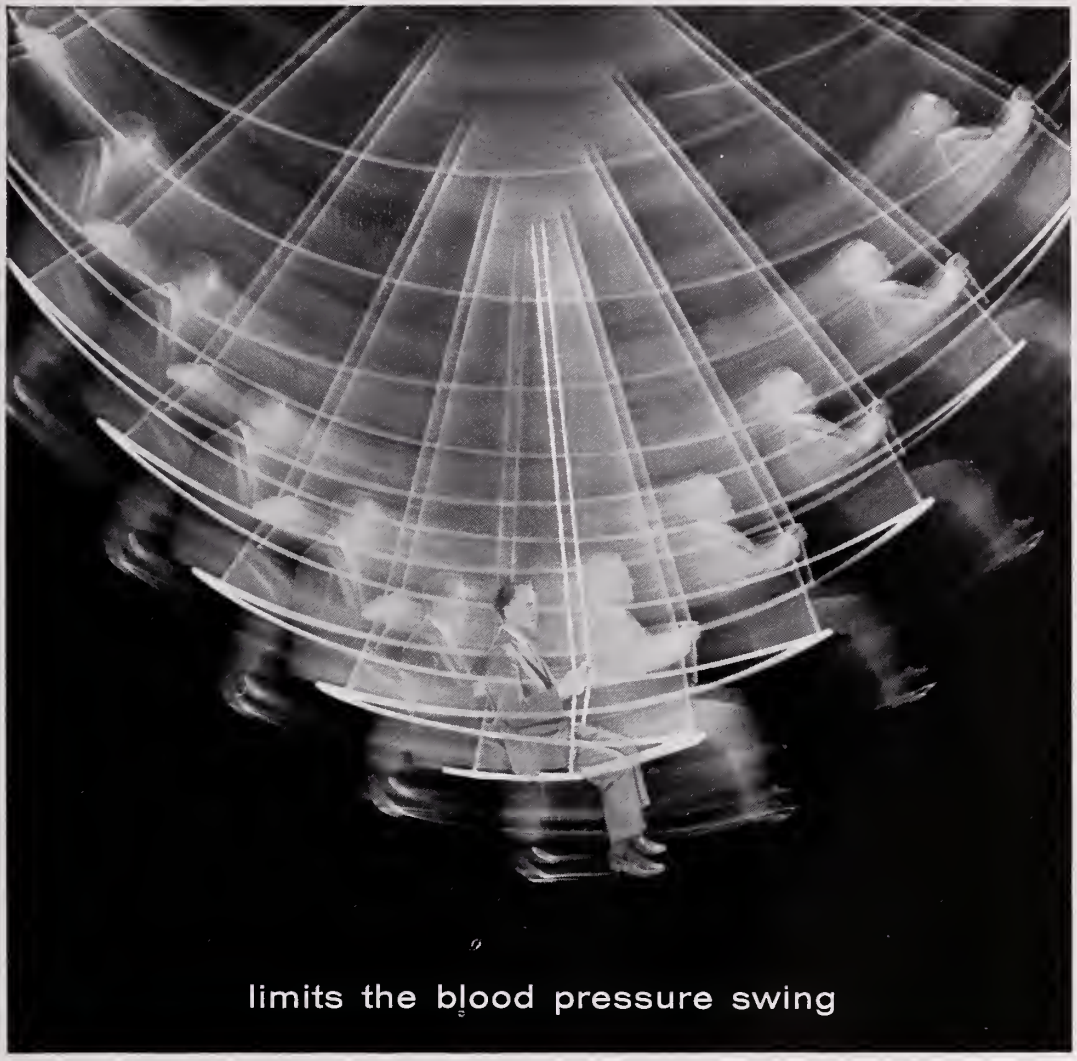
ARTHUR E. HARDY, M.D., *Secretary*

REPORT OF THE SECRETARY

At a meeting of the Council held since the January meeting of the House of Delegates, the following actions were taken:

1. Reports from the chairmen of the Sesquicentennial Celebration Committee, and the Health Fair Committee, were received, and the Council approved of the proposal for a Health Fair, and it authorized the committee to proceed with the plans for it with a tentative budget of $15,000 to $16,000 which would be provided, if necessary, by assessment up to $20 per member of the Society.
2. The Council received a detailed report of the national legislative conference held in Chicago

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HOUSE OF DELEGATES

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on March 18-19, and it approved of suggestions of the Society's delegates to that conference for publicity to the membership of the Society on the major issues involved.

3. The Council unanimously voted that Miss Grace E. Dickerman, *Librarian Emeritus*, who was librarian when the Society opened its building in 1912, be nominated to the membership at the annual meeting for election to the Society as an honorary member.
4. The Society named Doctor Francis B. Sargent as the official delegate, with legal counsel and the executive secretary, to the Medical-Legal Conference sponsored by the American Medical Association to be held in New York in April.
5. The Council voted that the district medical societies be urged to co-operate fully in the operation of local polio immunization clinic programs when there is a demonstrated need for such clinics.
6. A donation of $50 was made to the National Society for Medical Research to further its activities.
7. Approval was given to the Committee on Industrial Health to conduct a poll of the membership to ascertain what members are engaged in industrial medicine, or are interested in such practice.
8. The Council nominated to the American Medical Association as nominees (one to be selected) as the key legislative representative between the Society and the A.M.A. the following: Doctors F. B. Agnelli, Arthur E. Hardy, and Thomas Perry.
9. The Council voted that a by-law change be submitted to the House relative to the composition of the committee on public policy and information.
10. A report on the proposal for a medical assistants' association in Rhode Island was received and placed on file.
11. The Council voted to dispense with a scientific interim meeting in 1961, and it voted that the Society should join with the Auxiliary in sponsoring its proposed "family day" on Sunday, October 15, at the Anderson Farm in Coventry.

Respectfully submitted,

ARTHUR E. HARDY, M.D., *Secretary*

BENEVOLENCE FUND

During 1960 the Trustees of the Benevolence Fund extended financial aid to three physicians and or their families. Two physicians died to whom the Trustees had previously given financial assistance.

In addition to financial grants to two physicians during the year, the Trustees also provided these physicians, and the family of another physician, with family Blue Cross and Physicians Service coverage, paid by the Benevolence Fund.

The Trustees express their appreciation to the membership of the Society, the Providence Medical Association in particular, and the Auxiliary for their continued generous support of this most deserving program of the Society.

A summary financial report for 1960 is presented:

Cash balance, Savings Dept., Industrial Nat'l Bank, Providence, Jan. 1, 1960		$ 5,844.07
Receipts, all sources, 1960		5,267.50
Interest on savings account		241.90
Total assets		$11,353.47
Benefits paid:		
In cash to two physicians	$1,000.00	
Blue Cross-Physicians Service coverage (three families)	426.60	
Total		1,426.60
Cash on hand, Savings Dept., Industrial Nat'l Bank, Providence, Jan. 1, 1961		$ 9,926.87

Respectfully submitted,

DAVID FREEDMAN, M.D., *Chairman* (1961)
HENRY J. HANLEY, M.D. (1962)
GEORGE W. WATERMAN, M.D. (1963)

COMMITTEE ON DIABETES

The Diabetes Committee has had an outstanding year.

During our fall Diabetic Detection Drive, probably our best fair ever was held under our hospital rotating policy for greater Providence at the Memorial Hospital in Pawtucket (Doctor Albert Tetreault, chairman). Very successful fairs were initiated at Newport Hospital (Doctor Janis Gailitis, chairman) and at the 455th General Hospital at the new Army Training Center in Warwick (Doctor Peter Erinakes, chairman).

The drive was sponsored by the Rhode Island Medical Society in co-operation with the Rhode Island Diabetic Association; the Rhode Island Heart Association; the Rhode Island Public Health Department; the Rhode Island School of Pharmacy; the Rhode Island School of Podiatry; the University of Rhode Island School of Nursing; the Rhode Island Division of the American Cancer Society; the Health Division of the Rhode Island Council of Community Services; the Hospital Society of Rhode Island; the Rhode Island Tuber-

culosis and Health Association; the Rhode Island Society of Neurology and Psychiatry; the Rhode Island Society of Ophthalmology; the Rhode Island Pharmaceutical Association; the Clinical Laboratory Association; P.T.A. groups; the Women's Auxiliary of the Rhode Island Medical Society; the Rhode Island League of Nursing; and leading drug firms.

We have co-operated with Doctor Thomas H. Murphy and the Rhode Island Department of Health in his diabetes detection surveys in Block Island, South County, and Northern Rhode Island; and with Miss Marjorie Wilbur, R.N. in her industrial diabetes detection program.

The Committee has also co-operated in strengthening the Rhode Island Diabetes Association and the establishment of the Clinical Association with that group.

Our plans are to encompass all of Rhode Island in the diabetic program, not only in the detection drive, but also in a continuing effort throughout the year.

Thanks are especially due to Doctors Louis Kramer, Albert Tetreault, and Mr. John Farrell for giving us the benefit of their energy and experience.

Respectfully submitted,
WILLIAM L. LEET, M.D., *Chairman*

INDUSTRIAL HEALTH COMMITTEE

The Committee on Industrial Health met twice in the fall of 1960 and discussed the present workmen's compensation law as it relates to the reporting of "back injuries." The Committee was willing to recommend, if required, to suggest the elimination of the portion of the law which relates to such presently required (but not done) report.

The Committee also held a seminar or panel discussion at the Cranston Print Works on February 22, 1961, at which about forty persons were present. Nearly every one of this Committee was present and took an active part.

A future panel discussion about another subject relating to industrial medicine will be held in the fall of this year, probably October, and it is possible that the members of the New England Industrial Medical Association will be invited to participate. Arrangements are at present under way for this meeting.

The chairman and two members of this Committee will be present in Los Angeles in the month of April, 1961, attending the annual meeting of the American Industrial Association. We hope to bring back a constructive report.

Respectfully submitted,
STANLEY SPRAGUE, M.D., *Chairman*

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LIBRARY COMMITTEE

The figures in this report speak for themselves. Answers to innumerable questions, bibliographic searches, active participation in librarians' gatherings, loans of books and periodicals, exchanges, gifts, material sent as far as Pakistan, and preparation for the Sesquicentennial Celebration, all serving to show that our institution of learning is increasing in stature. This, mainly, because of the ability and tireless efforts of the librarian, Mrs. Helen DeJong, with the help of the librarian emeritus, Miss Grace Dickerman, and the assistant librarian, Miss Deborah Clarke.

FRANCESCO RONCHESE, M.D., *Chairman*

Report of Librarian

Each year, we plan one or two major projects for the months to come; each year, we fall short of our goal but, bit by bit, we manage to make some progress on the backlog of work. Planning for the Sesquicentennial Celebration was our top priority item for 1960-61 and, although we have failed in our manual labor (the reshelving and polishing mentioned in the last report) we *have* succeeded in locating available material needed for the histories of the societies, state and district. We have searched every cupboard and dusty corner and old records (many handwritten) have been gathered together. All portraits, photographs, clippings and historical mementos have been indexed and the location marked. Our collection of old instruments has been placed in an easily accessible section of the storeroom.

Finding early accounts of the Rhode Island Medical Society presented no problem as we have the original records; the same is true of the Providence Medical Association. One other district society was foresighted enough to store its early reports here. Many records of the other societies have, unfortunately, disappeared and we have had to piece together their histories from occasional newspaper items and accounts published in our medical journals. For this reason, we hereby invite anyone who has early records in his possession to place them in this Library for safekeeping.

The past year has seen considerable activity in the field of Library co-operation. We met with a group of Rhode Island librarians in September, at the invitation of Mr. Stuart C. Sherman, librarian of the Providence Public Library, to discuss library resources in the state at the present time and plans for the future development. In October, the librarian was a member of a panel discussion on *New England Libraries in the Life Sciences* which was part of the program of the Third Annual Meeting of the New England Medical Library Association, held in Burlington, Vermont. In addition to the helpful information gathered at these meetings through the papers and discussion, there is great value and consolation in the informal small talk. It's a comfort to know that someone else has had a nightmare of being buried in an avalanche of the *printed word* and that all libraries, large or small, suffer chronically from shortage of space, staff and time!

The Rhode Island medical librarians published the 4th edition of the UNION LIST OF MEDICAL JOURNALS, in September. Eighteen libraries now co-operate in this venture and Brown University continues, most generously, to print it for us. In addition to our local list, we have contributed to the 1960 CHECKLIST OF PERIODICALS AND SERIAL TITLES CURRENTLY RECEIVED IN MEDICAL LIBRARIES IN THE NEW ENGLAND STATES, compiled by Mr. Harold Oatfield of the Pfizer Research Laboratories in Groton, Connecticut. Thus Interlibrary Loan grows and our physicians receive better service in finding needed reference material.

At the request of the Library of Congress, we sent a list of our small group of manuscripts for inclusion in the NATIONAL UNION CATALOG OF MANUSCRIPTS. The papers of Charles V. Chapin make up our largest collection.

The number of duplicate periodicals stored in the basement has been increasing steadily and we had reached the storage saturation point. With co-operation from the weather (a blizzard) we found a



nice, quiet day to sort and list them. Some of the shelves are now clear with 129 items going to local libraries and 582 items sold to magazine dealers.

These were the larger projects. The daily routine is summed up in the following statistics: We received 498 bound volumes through purchase, review, gift, and conversion by binding; 278 were duplicates and were discarded or given to other libraries. Our present total is 43,123. Our readers numbered 2,499 of whom 1,281 were physicians and 1,218 general public. In addition to the readers-in-the-flesh, we averaged 12.6 requests a day by telephone (only requests for information involving actual use of library reference tools were counted). Circulation included 1,452 periodicals and 417 books; of these, 62 were borrowed from the Davenport Collection. We prepared 329 bibliographies. We are receiving 438 periodicals and serials currently. Our interlibrary loan figures show 394 journals and 50 books borrowed from us; 15 journals and 1 book borrowed by us from other libraries. In addition to actual loan, we have verifaxed six items one of which was sent to Pakistan. We have received 30 single issues of periodicals through the Medical Library Association. 32,217 bound volumes and 4,571 unbound volumes and pamphlets have been catalogued to date.

Again, we want to say "thank you" to our friends of the Library who do so much to help us grow with their generous gifts of journals and books. Specific acknowledgments appear in *On the Medical Library Bookshelves*. And the "we" I have used in this report is not editorial — it refers, not only to the librarian, but, also, to Miss Dickerman who has worked many hours in spite of failing health and to Miss Clarke who works overtime willingly and often, and to the staff of the executive office whose members are always helpful.

Projects for the coming year? We have several but we're going to try to sneak up on them this time! Perhaps, by not mentioning them, we'll feel less White Rabbitlike, watch in hand, late to the Duchess's party!

MRS. HELEN M. DEJONG, *Librarian*

MATERNAL HEALTH COMMITTEE

Three meetings have been held by this committee since our last report — one at the home of Doctor William Reid, one at the home of Doctor Guyon Dupre, and one at the home of the late Doctor John Walsh.

There were fifteen deaths during the year 1960 which is an increase over 1959 when we had only nine deaths. These deaths were reviewed in detail and seven of the fifteen were classified as direct obstetric deaths. The obstetric death rate (commonly known as the maternal death rate) is the number of direct obstetric deaths per 10,000 live births over a period of twelve months. We had 19,306 live births in the state during the year 1960 which gives us an obstetric death rate of 3.6. This is only slightly less than the national average of 3.8 per 10,000. In 1959 our rate was only 2.1. Five of the deaths were voted as preventable which means that this committee still has an important task to perform in helping improve our obstetrics in the state.

One problem that we have encountered particularly during the past year is in determining the exact cause of death in these cases. In 1956 the state ruled that all maternal deaths have to be reported to the medical examiner. There were four cases this year which were reported to the medical examiner, and the death certificates were signed by him without an autopsy. These cases were questionable cases of sudden death with which the committee was not completely satisfied as to the diagnoses. We have communicated with the attorney general regarding this problem and hope to have better co-operation in this matter in the future.

To the best of our ability, the causes of death were grouped and classified as follows:

Direct Obstetric Deaths:
1. Traumatic rupture of the uterus
2. Amniotic fluid embolism
3. Postpartum hemorrhage due to uterine atony
4. Tubal pregnancy with pulmonary embolism
5. Abruptio placenta with post-operative shock
6. Cerebral hemorrhage
7. Cardiac arrest

Indirect Obstetric Deaths:
1. Suicide
2. Rheumatic heart disease with cardiac arrest
3. Subacute bacterial endocarditis
4. Pneumonia

Non-related Deaths:
1. Acute mastoiditis with rupture of brain abscess
2. Porphyrinuria
3. Epilepsy
4. Hodgkin's Disease

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The committee would like to express its appreciation to those members who acted as hosts for our meetings this past year. Our last meeting was held at the home of the late Doctor John Walsh on February 28, 1961 where we enjoyed, as we have at many meetings in the past, his usual wonderful hospitality. His sudden passing will be a great loss to this committee which he had served on since its inception in 1931. When Doctor Brackett retired, Doctor Walsh became chairman and continued in this office until he resigned the chairmanship in 1956. The Rhode Island Medical Society has suffered the irrevocable loss of one of its most capable and nationally known obstetricians. His dynamic, positive, and progressive personality was a stimulus and example to all of us. He will be greatly missed by this committee.

Respectfully submitted,
STANLEY D. DAVIES, M.D., *Chairman*

PREVENTION AND TREATMENT OF ATHLETIC INJURIES

This newly formed Committee on Prevention and Treatment of Athletic Injuries had its initial meeting at the Medical Library on Monday, February 27, 1961, with the following members in attendance: Doctors A. A. Savastano, chairman, G. Edward Crane, Edwin B. O'Reilly, and William J. Schwab.

At this meeting the purpose and function of the newly appointed committee was discussed and it was agreed that a preliminary meeting should be held with representatives of the Rhode Island Secondary School Principals' Association to determine what topics should be discussed at a sports injury conference. It was also suggested that the Football Coaches' Association, the school physicians, and the supervisors of athletics be alerted to the plans of the conference when it is formulated.

A second meeting was held on March 13, 1961 with the following in attendance: *Committee of the Rhode Island Medical Society* — Doctors A. A. Savastano, chairman, G. Edward Crane, William J. Schwab, Edwin B. O'Reilly, and Salvatore Turco; *Committee on Athletics of the R. I. Secondary School Principals' Association* — Mr. Joseph P. Delaney, chairman, Hope High School; Mr. C. Herbert Taylor, superintendent of schools, Cranston; Mr. William Kutneski, assistant principal, Cranston East High School; Mr. William Falk, Hope High School; Mr. Edward F. Mullen, Hope High School, and Mr. John F. Cronin, Department of Recreation. Also present was Doctor Adrien Tetreault, school physician of Pawtucket, and John E. Farrell, SC.D., executive secretary of the Society.

At this meeting the group unanimously agreed to hold a one-day symposium on the prevention and treatment of athletic injuries and permission was to be obtained from the Providence College authorities to use the gymnasium at said College. It was further agreed that we would like to hold the symposium on Monday, September 11, 1961. The conference would start at 1:00 P.M., continue through the afternoon, recess for the evening meal, and then resume for an evening session.

Subsequently, definite permission was obtained from Providence College to hold the conference in their gymnasium and Doctor Michael Walsh, commissioner of education for Rhode Island, has also agreed to excuse from their afternoon commitments the members of the Rhode Island State Public School Systems eligible to attend the meeting.

The Committee is scheduled for another meeting on April 20, 1961 at the Medical Library at which time a program schedule will be set up for the subjects to be discussed at the September meeting.

As things now stand we expect to invite all secondary school athletic directors, coaches, trainers, physical education instructors and school physicians.

Respectfully submitted,
AMERICO A. SAVASTANO, M.D., *Chairman*

PUBLIC LAWS COMMITTEE

Please accept this report concerning the activities of the Committee on Public Laws for the Legislative session of the Rhode Island legislature in the Spring of 1961.

The committee met with Mr. John Farrell, executive secretary, who had reviewed proposed legislation submitted to the 1961 session of the Rhode Island General Assembly, that has any bearing upon medicine, in particular or in general.

The legislation thus far proposed covered a wide range of subjects. The legislation already enacted were: the changing of the name of the State Curative Center to Doctor Donley Rehabilitation Center; a bill memorializing Congress of the United States to enact legislation of the Forand Type; a bill concerning a resolution upon the death of Doctor Arthur H. Ruggles; and a veterans' bill which was a resolution opposing efforts to diminish

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Studied by the committee were bills on the basic science, aid for the blind; bloodmobile; Blue Cross-Physicians Service; cancer; civilian defense; consumers' council; evidence; health insurance; public assistance; physicians' lien; social workers; veterans; workmen's compensation that included occupational deafness; employers; medical services and rate reports. These bills were studied and recommendations were made pro and con on many of the bills. Inasmuch as these bills now go to the various committees of both the House and Senate, the various recommendations made were sent to each chairman of each committee and to each individual member of each committee, specifying the reasons why our committee were either for or against the various types of legislation that are being proposed.

A copy of our recommendations is filed with the executive office and they are available for inspection by any member of this house, or by any member of the Rhode Island Medical Society who desires to comment upon them.

Governor John Notte was also furnished with copies of this committee's reports on legislative proposals.

Respectfully submitted,
FREEMAN B. AGNELLI, M.D., *Chairman*

PUBLIC RELATIONS COMMITTEE

During the year press releases were issued by the executive office following actions taken by the Society on various matters of public interest, such as polio immunizations, report on insurance coverage for the aged in Rhode Island, etc. Due to the fact that the various committees from time to time take action on matters of general public interest, it is necessary that public information be given promptly, and therefore this work has not been subject to action by the Committee on Public Policy.

In view of this situation recommendation has been made to the Council that the personnel of the committee, and its assignments be reviewed, and possibly changed to allow it to function as a working committee.

On the broad public information front the committee has aided in several projects involving television, radio and motion picture releases. The Committee co-operated with the Auxiliary in its very successful television programs that were well received.

The radio disks of the A.M.A. releases known as *Medical Milestones* were distributed to five radio stations, and they were used by three, all of whom commented favorably on the presentations.

A.M.A. motion pictures were publicized as available to schools, clubs, etc., and reports indicate that such films as *Helping Hands for Julie, Medicine Man, Whitehall 4-1500, I Am A Doctor, Even for One*, and *A Life to Save*, were shown at schools in Narragansett, Pawcatuck, Woonsocket, Cranston, Providence, Charlestown, and also at several grange and civic club meetings.

Respectfully submitted,
ARNOLD PORTER, M.D., *Chairman*

SCIENCE FAIR COMMITTEE

The 1961 Rhode Island Schools' Science Fair, again held in the Marvel Gymnasium at Brown University, continued to maintain the excellence of displays that has marked this exhibition in recent years.

Your committee spent a good part of Easter Sunday viewing the many exhibits, and its decisions on the six winners, three from senior high schools and three from junior high schools, were as follows:

Senior High Awards

1. Carol Ann DeAngelis of St. Patrick's High in Providence
   Exhibit: Digestive System of Animal Phyla
2. Mary E. Flannagan of St. Teresa's High, Providence
   Exhibit: Visual Version
3. Arlene E. Antonian, St. Mary's Academy, Riverside
   Exhibit: The Structure of Chromosomes

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Junior High Awards

1. Peter S. Arnold of Lincoln Junior High, Cumberland
   Exhibit: Heart-Lung Machine
2. William Darby, St. Teresa's Junior High, Pawtucket
   Exhibit: Our Life-Giving Stream
3. Charlene Miga of Burrillville High
   Exhibit: Beef Tapeworm

* * *

The winners named by the Society will be presented award certificates and a $25 U.S. Treasury bond at the evening session of the 150th Annual Meeting of the Society, at the Medical Library, May 2, 1961.

Respectfully submitted,
JOHN F. W. GILMAN, M.D.
LELAND W. JONES, M.D.
CHARLES L. YORK, M.D.

SOCIAL WELFARE

(Continuing Report — January, February, March, 1961)

The Committee met in February with Mr. Albert P. Russo, new director of the state department of social welfare, who said that the basis of all activities of his department would be for close co-operation with the medical society, and in particular with the committee on social welfare. The committee commented on the appointment of medical personnel without consultation in any manner with the medical society, and it noted that the president of the medical society had been given assurance by the Governor that the Society would be informed of any proposed medical change or appointments.

It was suggested in view of medical appointments made by the state government of out-of-town personnel when it seems that there are capable and qualified people within the state and if suitable compensation is the sole deterrent then the state government should seek realistic wage payments for medical and allied personnel and that the medical society would co-operate with such a proposal in every way possible.

The news release quoting the Governor as opposed to the Kerr-Mills legislation already enacted by Congress, without comment on the fine co-operation of the pooled fund of the division of public assistance, drew comment from the committee.

The matter of drug costs for welfare patients was again reviewed. The Committee expressed approval of a letter received from a drug company relative to a 10% refund for prescriptions for welfare patients provided that no physician would be required to prescribe only from one company, and that the Division of Public Assistance would seek to get all the major pharmaceutical companies to make the same refund arrangement.

On March 1, a new punch-card system utilizing IBM equipment for payment of medical services and supplies provided eligible recipients of public assistance was put into operation. It is hoped that this new system, developed after 18 months of study, will bring a real improvement on the previous method of processing bills.

Because of the attitude of many of the welfare recipients, their failure to call upon doctors at their offices, and their demand for house calls that are not emergency in nature and because the Medical Bureau of the Providence Medical Association is encountering increasing difficulties in servicing calls a conference was held, and a new approach to the problem was evolved. Each welfare recipient's call to the Medical Bureau will be recorded and followed through by the physician answering the call. The recipient without a family doctor will be urged to obtain his own physician, and to be instructed that he must follow the advice of his physician. Failure to act in a responsible manner shall be handled by the Welfare Department. After a three-months' education program, the results will be studied by the Committee and the Welfare Department for further improvement and action.

Respectfully submitted,
PETER L. MATHIEU, JR., M.D., *Chairman*

BOARD OF TRUSTEES OF THE LIBRARY

The extensive repairs to the Library building in 1960 has prompted the postponement of any projected major improvements to the interior of the building for this year. However, within the allocated budget for repairs the necessary improvements have been carried out.

The winter storms created a roof problem in that a sizable fissure appeared unexpectedly over the auditorium section of the Library, resulting in water seepage into the building. The roof was immediately repaired, and in addition a copper covering for access to the loft from the roof is to be replaced as it was discovered to be in poor condition.

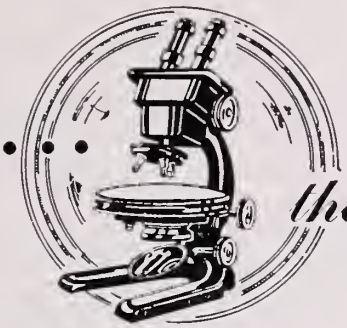
The water damage to the ceiling and wall of the auditorium, and reading room will be corrected by painting within the next month. In addition, the interior window sash in the main reading room will be painted.

Necessary repairs to the sidewalk from erosion will also be completed.

Respectfully submitted,
FRANK W. DIMMITT, M.D., *Chairman*

PATRONIZE JOURNAL ADVERTISERS

THROUGH . . . the Microscope



American College of Obstetricians Inducts Five Rhode Islanders

At its tenth anniversary meeting held in Bal Harbour, Florida, last month the American College of Obstetricians and Gynecologists inducted 473 new Fellows among whom were five Rhode Islanders: Doctor George W. Davis of Edgewood, Doctors George W. Anderson, George A. Ernst, and John T. Hogan, all of Providence, and Doctor Ernest L. Dupre of Woonsocket.

District 1 chairman for this year is Doctor C. Lee Buxton of Yale University School of Medicine, and the section chairman for Rhode Island is Doctor Frank I. Matteo, vice president of the Rhode Island Medical Society, with Doctor Stanley Davies of West Warwick the vice chairman. The next district meeting is scheduled for Boston on October 5-7.

Blue Shield Plans Pass 47-Million Member Mark in 1960

Enrollment in the nationwide Blue Shield Plans surpassed the 47,000,000 member mark at the end of 1960, the National Association of Blue Shield Plans reported in Chicago recently. Total membership in the 74 medical-surgical Plans reached 47,084,988 on December 31, 1960, representing an enrollment of one out of every four Americans, and nearly 15 per cent of the total Canadian population.

The net gain in membership for 1960 amounted to 2,292,065, the national association noted in its year-end report. The national Blue Shield totals for the first time included the membership of Surgical Service, Inc., Albuquerque, New Mexico, and Physicians Service, Providence, Rhode Island, who were approved as active members of the National Association of Blue Shield Plans last year. The combined year-end enrollment of these two new Blue Shield Plans was 659,240 members. Also included in the enrollment figures were federal workers who selected Blue Shield under the Federal Employee Health Benefit Program in 1960.

Four statewide Blue Shield Plans registered impressive enrollment gains over the twelve-month period. California Physicians' Service, the Blue Shield Plan headquartered in San Francisco, added nearly 192,000 members during 1960, while Texas Blue Shield registered a net gain of more than 185,000 members, and Massachusetts Blue Shield added almost 140,000 members and New Jersey Blue Shield 126,000 members.

The national association also reported that four Blue Shield Plans have enrolled more than 60 per cent of the population in the areas they serve. They are the Plans serving the District of Columbia, Rhode Island, Delaware and Rochester, New York, areas.

House Committee Supports Social Security Increase

The House Ways and Means Committee on March 27 approved a scaled-down version of President Kennedy's plan for higher social security benefits. . . . The vote was 22 to 2. . . . The plan would boost cash benefits this summer for 3,675,000 persons under social security. . . . It also would permit male workers to retire at age 62 and draw permanently reduced cash benefits. . . . The social security tax, now 6% (3% employee, 3% employer) on a tax base of $4,800 would be raised to 6¼% (3⅛% employee, 3⅛% employer). . . . Kennedy originally had proposed tax increases of double these amounts, effective January 1, 1963. . . . The committee decided to advance the date of the increase to January 1, 1962. . . . The increased benefits include: (a) a boost of 10% in cash benefits for widows of deceased workers; (b) an increase from $33 to $40 in the minimum monthly benefit. . . . During the first full year, the increased benefits would cost close to $850 million. . . . The Kennedy plan would have cost a little over $1 billion annually in the early years. . . . This is the bill on which it is rumored the Administration may tag on the compulsory social security aged medical care program.

Who Knows Better Than the Socialists?

The Communist party of Illinois has recently distributed a brochure titled *The Forand Bill Can Be Won Now!* This brochure, under the subtitle

continued on next page

The Forand Bill is the Minimum indicates the future aims of the Illinois communists. The virtue of the Forand Bill is that it is a federal, rather than a state aid measure, and is built into the Social Security system. With all its present limitations the Forand Bill opens the door toward complete hospital, medical and surgical services for the aged, and ultimately for the whole population. It can be enacted at once by this session of Congress.

The December 1, 1960 supplement to *New America*, the official publication of the Socialist party, is devoted to the support of the Forand bill and its extension to everyone in the United States. This publication says in part, "The Forand bill's limitations will be only the limitations of Social Security itself — which, though important, do not subtract from the precedent this bill will establish . . . the Forand bill will not be paid for on insurance principles, according to factors of estimated 'risk.' It will be paid for through the tax mechanisms of Social Security — that is, Americans will pay according to their means, and receive (within limits) according to their needs. . . . Once the Forand bill is passed this nation will be provided with a mechanism for socialized medicine, capable of indefinite expansion in every direction until it includes the entire population. And it is already evident that there will be massive pressures in favor of such expansion."

The American Medical Association has been called "alarmist," among other things, for their insistence that Forand-type legislation is a step in the door to socialized medicine. This is no longer a matter for debate. This type of legislation is socialized medicine for those persons it would cover and would lead to the eventual socialization of the entire practice of medicine. WHO SHOULD KNOW BETTER THAN THE SOCIALISTS?

Disaster Medical Care Conference in New York on June 24

Defense Training for All — A resource for National Defense has been set as the theme for the ninth annual Conference on Disaster Medical Care in New York City, Saturday, June 24.

Sponsored by the American Medical Association's Council on National Security, the theme of the one-day meeting at the Statler-Hilton Hotel will be developed by the United States Air Force Medical Service.

Following opening remarks by Doctor Leonard W. Larson, Bismarck, N.D., A.M.A. president-elect, Major General O. K. Niess, surgeon general of the Air Force, will discuss the adaptability of military medical experience, research, and operations in civilian disasters.

The morning session, under the general heading, *The Problem*, will include discussions on nuclear war and your community, the value of training and exercises, transportation of the injured, and communications. A symposium titled *Organizing Community Resources* will portray the civil defense plans and activities of a local mayor, police and fire chiefs, professional health representatives, and other local groups.

Meeting the Problem will be the general topic for consideration at the afternoon session. Specific subjects for discussion are radiation fallout detection and monitoring; evaluating homes, buildings and other shelters; rudiments of universal first aid training; and techniques for survival — water, food, clothing, shelter improvisations.

Other program subjects will be presented on mass behavior patterns in disaster; legal obligations, public laws, martial law; moral obligations in disaster; and defense planning — a corporate effort for survival.

An interesting feature of the program is a one-hour skit on *Community Responses to Disaster*.

Persons desiring to attend the conference should write to the A.M.A. Council on National Security, 535 N. Dearborn St., Chicago 10, Ill. for additional information and advance registration.

Retired Federal Employees Eligible for Health Benefits July 1

The Civil Service Commission has announced approval in principle of the benefits structure and premium costs of the Uniform Plan to be offered retired Federal employees and survivor annuitants under the Retired Federal Employees Health Benefits Act which becomes effective next July 1. Details of the plan will be worked out during contract negotiations.

The Uniform Plan offers eligible annuitants the choice of enrolling for basic coverage alone, for major medical coverage alone, or for both. Annuitants will not have to meet any age or physical requirements for coverage under the Uniform Plan. The basic coverage will pay benefits in each calendar year of up to $15 a day for 31 days of hospital room and board, up to $150 for other hospital expenses, and benefits in accordance with a fee schedule for surgical charges. Because the individuals expected to be covered under this plan are, in general, in the upper age bracket, maternity benefits are not provided.

The major medical coverage will help pay for room and board charges for additional days in a hospital or convalescent hospital. After a deductible is met, the plan will also help pay for the additional costs of other hospital expenses and surgery. Further, it will help to pay for in-and-out-of-hospital charges for physicians' services, drugs and medicines, and special nursing. The major medical coverage has a $5,000 lifetime maximum for each annuitant and for each member of his family.

The Commission said that the offer of this type

continued on page 308

THESE 29,000 PEOPLE IN RHODE ISLAND NEED MEDICAL HELP

Heart disease, cancer, mental illness — everyone knows the nation's three major medical problems. Do you know that alcoholism ranks fourth? In the state of Rhode Island there are at least 29,000 alcoholics. These people need medical help. No one is in a better position to initiate and supervise a program of rehabilitation than the physician who enjoys the confidence of the patient or the patient's family.

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ROCHE LABORATORIES Division of Hoffmann-La Roche Inc.

THROUGH THE MICROSCOPE

continued from page 306

of major medical coverage — which includes benefits for out-of-hospital expenses — to a large group of already retired employees represents a breakthrough in providing health insurance for older persons. Providing benefits for room and board and skilled nursing care in a convalescent hospital is also a move forward in this area. This will help to pay for the kind of specialized care often needed by older persons after the acute stage of an illness.

The cost of the basic coverage will be $6.50 a month for self only and $13 for family enrollment. The major medical coverage will cost $6 a month for self only and $12 for family enrollment. The combined basic and major medical coverages will cost $12.50 a month for self only and $25 a month for family enrollment. Regardless of which of these three choices — basic, major medical, or both — the annuitant elects, the government will contribute $3 a month for self only and $6 for family enrollment. The annuitant will pay the remainder of the premium through deductions from his annuity check. Thus, the annuitant may obtain both basic and major medical coverages at a monthly cost to him of $9.50 if he covers himself only or $19 if he covers himself and family.

The Commission emphasized that any eligible annuitant may elect not to enroll in the Uniform Plan but instead to retain or acquire coverage offered through a qualified private plan. In this case the government contribution of $3 a month for self-only enrollment and $6 for a family enrollment will be made toward the cost of the private plan. The contribution will be paid to the annuitant by increasing his monthly annuity check by the appropriate amount.

The new program offers retired federal employees and survivor annuitants an opportunity to obtain the kind of health insurance coverage which best fits their needs and their pocketbooks, according to Andrew E. Ruddock, director of the Bureau of Retirement and Insurance which is administering the program for the Commission.

"Annuitants who may have been unable to buy health insurance coverage because of advanced age or health status may now obtain it through the Uniform Plan," he said. "Those who have been unable to afford health insurance can now in most cases acquire some protection, because the government will help to pay the cost. Annuitants who have had only basic coverage in a private plan may, if they wish, keep that coverage and in addition buy major medical coverage through the Uniform Plan. Of course, an annuitant who elects a combination of private and Uniform Plan coverage will still receive only one government contribution."

The first-year cost of the program to the government is estimated at from $15,000,000 to $25,000,000 depending upon the extent of participation.

Professional Unionists Get Top Federal Jobs

The list of former professional unionists now holding down top government executive posts in the new Administration continues to grow. Among recent appointees have been Jack Conway, administrative assistant to Reuther, to be deputy administrator of the Housing and Finance Agency; Hyman H. Bookbinder, AFL-CIO legislative representative, to be a special assistant to Secretary of Commerce Hodges; Charles F. MacGowan, international representative of the Boilermakers Union, as director of the Office of Saline Water of the Interior department; and Mrs. Dollie L. Robinson, veteran staffer of the Clothing Workers and government employee unions, to be assistant director of the Women's bureau in the Labor department.

> . . . From the WASHINGTON LABOR WHIRL issued by the Chamber of Commerce of the United States.

"No Consultation Day" in Japan

On February 19, 1961, the Japan Medical Association and the Japan Dental Association sponsored a "No Consultation Day" in order to direct attention of the population to the fact that in spite of a Four-Point Plan submitted by the Japan Medical Association to the Ministry of Welfare, the Ministry continued to ignore the needs and recommendations of the doctors of Japan.

Under the Japan health insurance plan the medical fee is recognized to be the lowest in the world. For example a surgeon receives $9.00 (U.S.A.) for a cataract operation. Hence the Japan Medical Association had requested that the Welfare Ministry: (1) Release medical care under health insurance from restrictions; (2) Increase the medical fee at least 30%; (3) Decrease the annoying business routines associated with health insurance; (4) Simplify the medical fee system by abolishing the current dual system and providing for differential fees according to area.

The recent strike of hospital employees had forced the Welfare Ministry to recommend diet approval of an average increase of 14% for hospitals and 6% for clinics. This irrational discrimination between hospitals and clinics and the failure of the leaders of the Liberal Democratic party to reach an agreement with the medical and dental association representatives in spite of the fact that the special committee on medical care of the Liberal party had endorsed the J.M.A.'s Four-Point Plan and criticism of the Japan Medical Association by the Ministry of Welfare, inspired the "No Consultation Day" demonstration. Doctors and dentists declined to accept consultations but provided emergency care for those who required it and had an

adequate medical staff at hospitals and clinics. The doctors distributed pamphlets and held public relations meetings and press conferences on that day in order to inform the population as to the actual status of the medical care system.

The Japan Medical Association further announced a second "No Consultation Day" would be held on March 5th and that on April 1, 1961 the doctors would withdraw their services from the health insurance plan.

Late in February at joint meetings between political leaders and representatives of the doctors and dentists, some progress was achieved toward solving the problem. The second "No Consultation Day" and the withdrawal from the insurance plan was canceled pending further negotiations with the government.

However, the Japan Medical Association continues ready to effect *No Consultation Days* and to withdraw from the health insurance plan in the event that the government fails to give prompt and just consideration to the problems of the Japanese doctors.

A.M.A. New York Meeting a "World's Fair" of Medicine

The American Medical Association's 110th annual meeting, the *World's Fair of Medicine*, will bring an estimated 50,000 persons, including 25,000 physicians, into New York City, June 25-30.

The five-day convention, biggest of its kind in the world, will attract not only doctors, but also their wives and families as well as residents, interns, exhibitors; in fact, people connected with all the allied fields of medicine. Hence, the convention theme: *Teamwork in Medicine.*

The 1961 meeting will mark the eighth time that the A.M.A. has met in New York. The last convention there was in 1957 when 23,888 physicians registered.

Technical exhibits, numbering 827 and displaying everything from medical books to diapers, and more than 350 scientific exhibits largely developed, designed, and manned by physicians reporting their research, will take up practically every inch of space on all four floors of New York's big Coliseum.

Millions Have Three Health Coverages

More than 120 million Americans are protected by three different kinds of health insurance against the economic consequences of ill health, the Health Insurance Institute reported recently.

"At least two thirds of the nation's civilian population have achieved a substantial degree of financial security by protecting themselves with health insurance policies that help pay hospital and surgical bills, and help replace income lost due to disability caused by illness or injury," said the Institute.

As of the beginning of 1960, the Institute estimated that 132 million persons had hospital expense insurance, 120 million persons had surgical expense insurance, and 43 million workers—through formal plans—had their earnings protected by loss-of-income insurance. Millions of other workers had some degree of income protection through informal arrangements.

According to the U.S. Bureau of the Census, the size of the average family in the United States is 3.7 persons. The Institute calculated that, at a minimum, the 43 million breadwinners with loss-of-income coverage were assured of a continuing income that would provide the necessities of life for some 130 million persons.

The Institute also said that millions of Americans have additional health insurance protection against the cost of doctor calls and other nonsurgical care by physicians. Included in this group are the estimated 86 million persons who have regular medical expense insurance.

Protection against the cost of hospital and surgical bills, and nonsurgical care by physicians is packaged together, said the Institute, in one type of health insurance, major medical expense insurance, which also provides benefits for medicines and drugs, medical appliances, private duty nursing, and ambulance service.

Major medical, little more than ten years old, now covers some 25 million persons.



THE WASHINGTON SCENE

A Report Prepared by the Washington Office of the American Medical Association

THE SERIOUSNESS of the national problem of mental illness was emphasized on three fronts recently in the nation's capital.

First, the Joint Commission on Mental Illness and Health reported on a comprehensive five-year study of the over-all problem. Second, another special government advisory committee recommended smaller community-sized mental institutions after a two-year study of facilities for care of the mentally ill. Third, a Senate subcommittee held hearings on the constitutional rights of mental patients.

The Joint Commission recommended sweeping reforms in the treatment of mental illness as well as expanded and improved facilities. It said some gains had been made in the past ten years but that the need for adequate facilities for humane, healing treatment of the mentally ill is still largely unmet.

More than half of the patients in state mental hospitals do not receive any treatment, largely because of inadequate facilities, the commission said.

The commission recommended that government spending at all levels — federal, state and local — for public mental patient services be stepped-up in the next decade from the present $1 billion a year to $3 billion a year.

Another recommendation was that there be a fully staffed, full-time mental health clinic for each 50,000 of population.

The commission, which was created in 1955 by a special act of Congress, had 45 members representing every national association and nongovernment agency concerned with mental health. The American Psychiatric Association and the American Medical Association had the leadership in setting up the commission.

The government advisory committee, composed of twelve state Hill-Burton and mental health authorities, recommended that states concentrate on smaller community or regional facilities "offering a wide spectrum of services."

Doctor Luther L. Terry, surgeon general of the Public Health Service, urged state governors to use the advisory committee's recommendations as guidelines for improving mental health facilities.

The Senate Constitutional Rights Subcommittee heard from Doctor Winfred Overholser that there is no foundation to charges that many Americans are "railroaded" into mental hospitals. Doctor Overholser is superintendent of St. Elizabeth's Hospital, large federal mental institution in Washington, D.C.

Doctor Lauren H. Smith, vice chairman of the A.M.A.'s Council on Mental Health, told the subcommittee that the A.M.A.'s future program in the field will include emphasis on more use of psychiatry in geriatrics, pediatrics and medical education, both at student and postgraduate levels.

Other activities planned for the A.M.A. program include closer co-ordination of activities of the A.M.A. council and corresponding committees of state medical societies.

* * *

The Food and Drug Administration, after the government filed suit against two drug firms for counterfeiting, reported that an extensive investigation showed that there is still relatively little counterfeiting of drugs.

Of 2,700 samples of drugs collected from 900 drugstores in the first three months of this year, only nine were found to be counterfeit.

FDA Commissioner George P. Larrick said he expected the problem of counterfeit drugs to continue because of the lure of easy profits. But he said results of the investigation supported the FDA view that "the facts to date do not warrant disturbing sick people about the quality of medications that they have been taking."

In the counterfeiting suit, General Pharmacal Co., Hoboken, N.J., and Lowell Packing Co., Long Island, N.Y., and eight officials of the two firms were charged with manufacturing counterfeit tranquilizers, diuretics, weight reducers and other drugs and selling them to drugstores in six states. The Justice Department charged that the companies put markings on pills making them appear like other trade-marked brands.

* * *

FDA ordered manufacturers, effective May 27, to supply samples of new drugs for testing by the government agency prior to clearance for sale.

In the past, the FDA has relied largely on scientific data supplied by the manufacturers themselves in clearing a new drug as being safe for sale. The FDA tested the drugs only on a limited and occasional basis and after they had been put on the

market.

* * *

The government is spending $4.1 billion a year in the health field, a Senate Government Operations Subcommittee reported. In the most detailed report of its kind ever published by a governmental group, the Subcommittee, headed by Senator Hubert H. Humphrey (D., Minn.), noted that $1.1 billion of the total cares for sick members of the armed forces and their dependents in hospitals. The tab for Civil Service workers' sick leave totals $315 million a year. About $650 million a year is spent on medical research, with most of this carried out by the National Institutes of Health and the Veterans Administration.

* * *

The government ordered 250 physicians drafted this year due to the failure of enough interns to sign up for military service. It is the first physicians' draft in four years. All the draftees will be assigned to the Air Force. A department spokesman said the draft call would not prevent individual physicians finishing internship this year from volunteering for Air Force medical duty.

Legislative Roundup

House Passes Bill . . . The House on April 20 overwhelmingly passed the Administration-backed bill liberalizing social security benefits. . . . The Social Security Administration estimated that an additional $780 million in benefits would be paid out to 4,420,000 people during the first year under terms of the bill. . . . Major provisions of the bill are: (a) allows men to retire at 62 and draw smaller social security benefits than they would get if they waited until 65; (b) increases minimum benefits from $33 to $40 a month; and (c) raises benefits for aged widows, widowers, and parents 10%. . . . Originally called the "Road to Recovery Program," this bill marks the first time since the social security program was launched that Congress has acted to liberalize benefits in a nonelection year.

The End-Around . . . The House bill now goes to the Senate, where the proponents of the compulsory social security approach to health care of the aged may attempt to tack on a medical care amendment to this bill. . . . This "end-around" maneuver, if carried through successfully in the Senate, would mean that the amended bill would then go to a Senate-House Conference Committee. In this way, the proponents of the social security approach would avoid a battle in the House Ways and Means Committee on the bill introduced by California Democrat Cecil King (HR 4222). . . . It is interesting to note that President Kennedy told his news conference today he was not reconciled to the prospects of no vote in Congress this year on his medical care plan. At the same time, he conceded that a vote in the House this year was doubtful. . . . The House Ways and Means Committee has scheduled two weeks of hearings on the President's new tax proposals. . . . The hearings will begin May 3, and at least two additional weeks of executive hearings are expected. . . . Thus, the committee probably will not take up HR 4222 until at least June 1.

Accuse Ribicoff . . . Doctor F. J. L. Blasingame, A.M.A. executive vice president, accused HEW Secretary Abraham Ribicoff of making "false and misleading statements" in calling for support of the Administration's medical care for the aged bill. . . . Doctor Blasingame, in a statement issued April 18, declared that Ribicoff is misleading the public when he says the bill does not include physicians. . . . He said: "The bill definitely includes physicians. It includes interns, residents, and those physicians serving in hospital outpatient clinics. It also specifically includes pathologists, radiologists, psychiatrists, and anesthesiologists working in the hospitals. . . ." Doctor Blasingame asserted: "We think it's high time that Mr. Ribicoff, who occupies a position of enormous trust, began to shoot square with the citizens of this country and quit hiding the truth about medical care for the aged behind political sloganeering. . . ." Doctor Blasingame made his statement after Ribicoff, in a TV interview taped for New York stations, accused the A.M.A. of using "scare tactics" in fighting the Administration's program on medical care.

Expand Kerr-Mills . . . The Senate approved the Administration's program for aid to dependent children of unemployed parents, which contained a provision expanding the Kerr-Mills program. . . . The medical provision, which was proposed by Senator Robert S. Kerr (D., Okla.), increases from $12 to $15 a month the ceiling on state programs in which the federal government could help with matching funds for old-age assistance recipients. . . . Kerr said the $3 increase is needed to bring the welfare medical program closer to actual costs.

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1:00 P.M. to 9:30 P.M.

at

Providence College

Under the Auspices of the

Committee on the Prevention and Treatment of Athletic Injuries

of the

Rhode Island Medical Society

Conference open to all Physicians in Rhode Island, Secondary School Coaches, Trainers, Athletic Directors and Allied Personnel

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Medical Journal

Volume XLIV, No. 6

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(1) Carter, S.: M. Clin. North America 37:315, 1953.
(2) Maltby, G. L.: J. Maine M. A. 48:257, 1957.
(3) Crawley, J. W.: M. Clin. North America 42:317, 1958.

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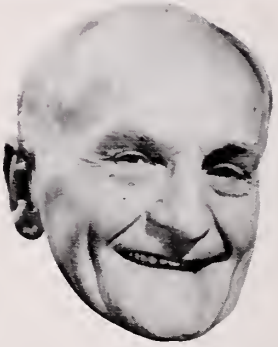
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references: (1) Nelson, W. E.: Textbook of Pediatrics, ed. 7, Philadelphia, W. B. Saunders Company, pp. 231-233, 1959. (2) Parrott, R. H., and Nelson, W. E.: *ibid.*, p. 759. (3) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (4) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (5) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960.

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TIME DISCUSSES THE ANATOMY OF ANGST

In the U.S. today, causes for . . . Weltschmerz are easy to find. Psychologists know that all change is threat and that all threat produces anxiety. The U.S., more than any other society in history, believes in change. Conservative in many ways, the U.S. has never been conservative in the sense of trying to preserve things the way they were yesterday. Its very orthodoxy is based on the idea of change: the most orthodox tenet in the American creed is that the individual can accomplish anything if he tries hard enough. It may be one of the glories of a free society, but it also carries great potential danger and may well be the greatest single cause of anxiety on the American scene. From the noble notion that man is free to do anything that he can do, the U.S. somehow subtly proceeds to the notion that he must do anything he can and, finally, that there is nothing he cannot do.

This leads to a kind of compulsory freedom that encourages people not only to ignore their limitations but to defy them: the dominant myth is that the old can grow young, the indecisive can become leaders of men, the housewives can become glamour girls, the glamour girls can become actresses, the slow-witted can become intellectuals.

Almost every boy in the U.S. has dinned into him the idea that he must excel his father — a guaranteed producer of anxiety, by Freudian theory, if the boy has grown up idolizing his father as a paragon of power and virtues. The process is severest in the sons of outstandingly successful men: their anxiety neuroses are as notorious as the traditional case of the preacher's son becoming a drunkard. A career girl is shredded by the need to excel father or mother or both, and for her the problem may be complicated by Oedipal feelings toward father.

Many people feel guilty simply about not being talented enough or intelligent enough or well-informed enough. If anybody can be anything he wishes, no wonder the businessman is made to feel guilty if he has neither ear nor taste for modern music (but somehow, the artist never seems to feel guilty about not understanding business). No wonder, too, that the adman thinks he ought to be able to write a novel or to know all about the atom. In an absurd misapplication of the idea of equality, one man's opinions become as valid as another's. Thus, every man competes not only in his own job or his own social setting: he also somehow feels he must compete with the TV newscaster and the editorial writer (not very difficult),* with the physics professor and the philosopher (very difficult indeed).

Every girl is tight-corseted with the propaganda that she must have a slim, svelte figure, no matter what her natural body build or bone structure. She may react to this either by trimming down mercilessly and suffering near starvation; or she may surrender to the neurotic pleasures of overeating— all the time rationalizing that the trouble is in her glands (which it almost never is). Another deliberate anxiety builder is the slogan, "Why grow old?" It introduces a prescription containing a teaspoonful of wisdom, such as the values of exercise and a balanced diet, diluted in an ocean of nonsense about wrinkle erasers and pep medicines. Actually, the less anxiety is associated with the inevitable aging process, the better are people's chances of growing old gracefully and with a sense of fulfillment.

The phenomenon of change in the U.S. contributes to anxiety in another way: no one "knows his place," and even if he does and likes it, there are no easy ways of announcing the fact to others. The worker can indeed still become boss, the immigrant a settled American. But how do they show their newly acquired place in life? No aristocratic titles, no rigid distinctions of dress are available; man's achievements can be signaled only by the fascinating game of displaying "status symbols." Hence the endless American preoccupation with what is "in" and what is "out"— clothes, addresses, speech, schools, cars . . . .

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References: 1. California Medicine, 80:375, 1954; 2. Peterson, D. M.: J. Missouri S.M.A., 40:279, 1943; 3. Lindberg, H. A., Treger, N. V., Barker, M. H.: Quarterly Bull., Northwestern Univ. Med. School, 22(1):59, 1948; 4. Davis, L.: Postgraduate Med., 9:321, 1951; 5. Goodman and Gilman, The Macmillan Co., New York, 1958.



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THE WASHINGTON SCENE

A Report Prepared by the Washington Office of the American Medical Association

THE AMERICAN MEDICAL ASSOCIATION branded as untrue certain statements by Abraham Ribicoff, secretary of Health, Education and Welfare, concerning the administration's legislative proposal to provide medical care for the aged under Social Security.

Doctor F. J. L. Blasingame, A.M.A. executive vice president, presented a point-by-point rebuttal in a letter to the more than 500 editors from throughout the country after Ribicoff addressed the annual meeting of the American Society of Newspaper Editors in Washington.

Doctor Edward R. Annis, Miami surgeon representing the A.M.A., accused Ribicoff of misrepresenting the role of doctors under the administration proposal. Doctor Annis answered Ribicoff on a radio-television program with Senator Kenneth B. Keating (R., N.Y.) which was taped in Washington. Ribicoff had made the misrepresentation on an earlier Keating program.

Doctor Blasingame said Ribicoff's statement before the editors that physicians are not included in the administration proposal, the King bill, "simply is not true." The A.M.A. official pointed out that the bill includes interns and residents in teaching hospitals as well as pathologists, radiologists, physiatrists and anesthesiologists working in hospitals or serving hospitals' outpatient clinics.

"Mr. Ribicoff further claims that the King bill provides free choice of hospital physician," Doctor Blasingame said. "The fact is only hospitals signing contracts with the federal government would be available to patients. If the only hospital in a community was not approved by the secretary of HEW, patients in that community would be forced to seek hospitalization in some other city. That would not afford free choice of hospital. If the patient's physician was not on the staff of the other hospital, the patient would be denied free choice of physician."

Doctor Blasingame also disputed Ribicoff's contention that the King bill is not socialized medicine.

"By common definition, any scheme which calls for a system of compulsory health care which is administered, financed, and controlled by the federal government is socialized medicine for that segment of the population it serves."

Representative Walter H. Judd (R., Minn.), who is a physician, was quoted as one of a number of House and Senate members who agree with the A.M.A.: "The public has been led to believe that they can get government financing without government control and ultimate government operation of medical services. It is naive for anyone to believe that Congress will take the people's money away from them through taxes and then allow the money to be spent by someone else without the Congress maintaining its own firm control."

Pointing out that the nation's physicians always have been in favor of medical care for all regardless of ability to pay, Doctor Blasingame said:

"It seems strange to us that Mr. Ribicoff continues to lobby for the King bill while completely ignoring the Kerr-Mills law, passed by Congress last year with strong support by the nation's physicians.

"The Kerr-Mills Law enables the states to guarantee to every aged American who needs help the health care he requires. And the states are implementing the law with unprecedented swiftness."

Doctor Annis pointed out on the radio-television program that "doctors would work for the government by working for the hospitals under contract to the government." He said those doctors would work "under rules, regulations and controls prescribed and laid down" by the H.E.W.

* * *

Krebiozen Evaluation

The Department of Health, Education and Welfare has agreed to make an impartial evaluation of the controversial cancer drug Krebiozen.

U.S. District Judge Julius H. Miner of Chicago requested the evaluation before proceeding with a $300,000 libel suit filed by Andrew C. Ivy, M.D., a leading endorser of the drug, against George D. Stoddard, PH.D., chancellor of New York University and former president of the University of Illinois.

In a letter to H.E.W. Secretary Ribicoff, Miner said:

"In my humble judgment, Krebiozen has too long been a controversial subject and the American public deserves that it be examined under neutral supervision and by the most competent experts in whom the people have implicit confidence."

continued on page 324



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DISTRICT MEDICAL SOCIETY MEETINGS

NEWPORT COUNTY MEDICAL SOCIETY

The Newport County Medical Society tendered a testimonial dinner at the Hotel Viking on May 10, 1961 to Samuel Adelson, M.D., newly elected president of the Rhode Island Medical Society. Doctor Adelson is the third member of the Newport County Medical Society to be elected president of the state medical society since its founding in 1811.

Those at the head table who paid tribute to Doctor Adelson were Banice Feinberg, M.D., of Providence, Captain Joseph Yon, commanding officer of the Newport Naval Hospital and Alfred Tartaglino, M.D., who presented an engraved gavel to Doctor Adelson on behalf of the local medical society. José Ramos, M.D., president of the Newport County Medical Society extended the congratulations and best wishes of the local society to Doctor Adelson on his election. Charles Dotterer, M.D., was toastmaster.

RICHARD R. KNOWLES, *Secretary*

WASHINGTON COUNTY MEDICAL SOCIETY

The quarterly meeting of the Washington County Medical Society was held at the Larchwood Inn in Wakefield, Rhode Island, on April 12, 1961.

The meeting was called to order by the president, Doctor James McGrath, at 11:10 A.M.

The minutes of the January meeting as circulated to the membership were unanimously accepted without additions or corrections.

There was about a 25% response to the postcards requesting suggestions for the use of the society funds and these were read to the membership. A Committee was appointed to discuss the matter and report on their findings or ideas at the July meeting.

The following communications were presented: A poster from the American National Red Cross Blood Program on *Vaccinia Immune Globulin (V.I.G.)*; A communiqué from the State Department of Health was presented concerning the prevention of paralytic poliomyelitis. A lengthy discussion of the entire membership on this problem followed. Mr. John E. Farrell, executive secretary of the Rhode Island Medical Society, presented a brief outline of the problem as it was being handled by the Providence area; the newly proposed Lien Law in regard to doctors was discussed briefly and the membership was urged to write to ensure its passage, and the material from the American Medical Association regarding Medical Care for the Aged was reviewed and passed around to the membership. The membership was then advised to see that the proper information was disseminated where it would do the most good.

Reports from Committee meetings: Doctor McGrath stated that Doctor Agnelli would present the report from the Committee on Judicial Matters at the next meeting. Doctor Tatum as the chairman of the Committee formulating the history of the Washington County Medical Society presented a bill for fourteen ($14.00) dollars for typing expenses. A motion was made, seconded, and passed to make an allotment to pay the bill. Doctor Tatum then asked for some aid in outlining noteworthy events and/or happenings in the society since World War II.

New Business: Two new applications for membership in the society were presented and were passed by the censors. The membership voted to accept the new applicants as members. The two were: Phillip Neri, M.D., and Charles Farrell, M.D., associate member.

Motion for adjournment was made and seconded. The motion carried and the business meeting adjourned.

The meeting was then turned over to the guest speaker, Captain Louis Haynes, MC, USN, who presented an extremely interesting discussion on *Clinical Experience with Frozen Banked Blood.*

This paper was presented with accompanying slides to facilitate the presentation.

Guests at the meeting included: William Hetzel, M.D., and John Farrell, SC.D.

Respectfully submitted,
JOHN J. WALSH, JR., M.D.

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THE WASHINGTON SCENE

concluded from page 320

Ribicoff said the National Cancer Institute would evaluate the drug when its sponsors presented the necessary data. But, he said, "any decision to undertake a study with human cancer patients must await, and depend on, the results of the evaluation of the existing clinical data."

* * *

Physicians' Retirement

A new bill to encourage physicians and other self-employed persons to set up their own retirement plans started through Congress with approval of the House Ways and Means Committee.

Bearing the same number, H.R. 10, as a similar bill which died in Congress last year, the new measure would permit a self-employed person to defer taxes on income placed in a private retirement program. The special treatment would be limited to $2,500 or 10 per cent of income each year, whichever is smaller.

Such income could be invested in qualified pension trusts, annuity programs, profit-sharing plans or a new type of nontransferable government bonds redeemable when the individual reaches retirement age or suffers disability.

An individual could start drawing benefits at age 59½, or earlier in the case of disability. A self-employed person would have to start drawing benefits by age 70½.

If a self-employed individual had more than three employees, he would be required to set up pension plans for them before he could benefit himself.

RIGHTS

"... I cannot pass over the Democratic platform without commenting on the distortion of the word "right." For example, the platform mentions the right of every worker to a useful and remunerative job; the right of every farmer to a decent living; the right of every family to a decent home; the right of every child to a good education; the right of aged persons to adequate medical care.

"Are these rights? Certainly not. They are no more than targets on which a society sets its sights. All too frequently we try to achieve them through direct government guarantees rather than through individual initiative and enterprise stimulated by sound government leadership.

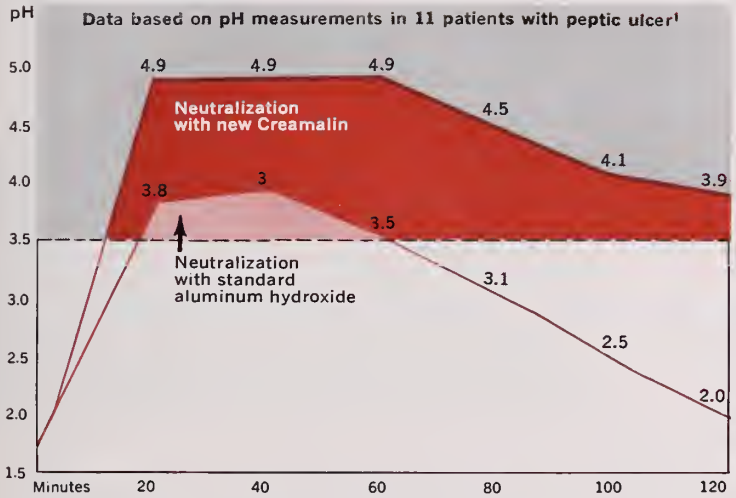
"The platform seems to say that every individual is entitled to the best of everything as a matter of right. Birth is the only qualifying condition. This is a dangerous philosophy. A nation is bound to deteriorate if the industrious, the strong, the creative and the self-reliant are forced, to the point of discouragement, to provide ideal living conditions for those who are not."

... EUGENE M. THORE, *vice president* and *general counsel*, Life Insurance Association of America, in an address at the 54th annual meeting of the Association.

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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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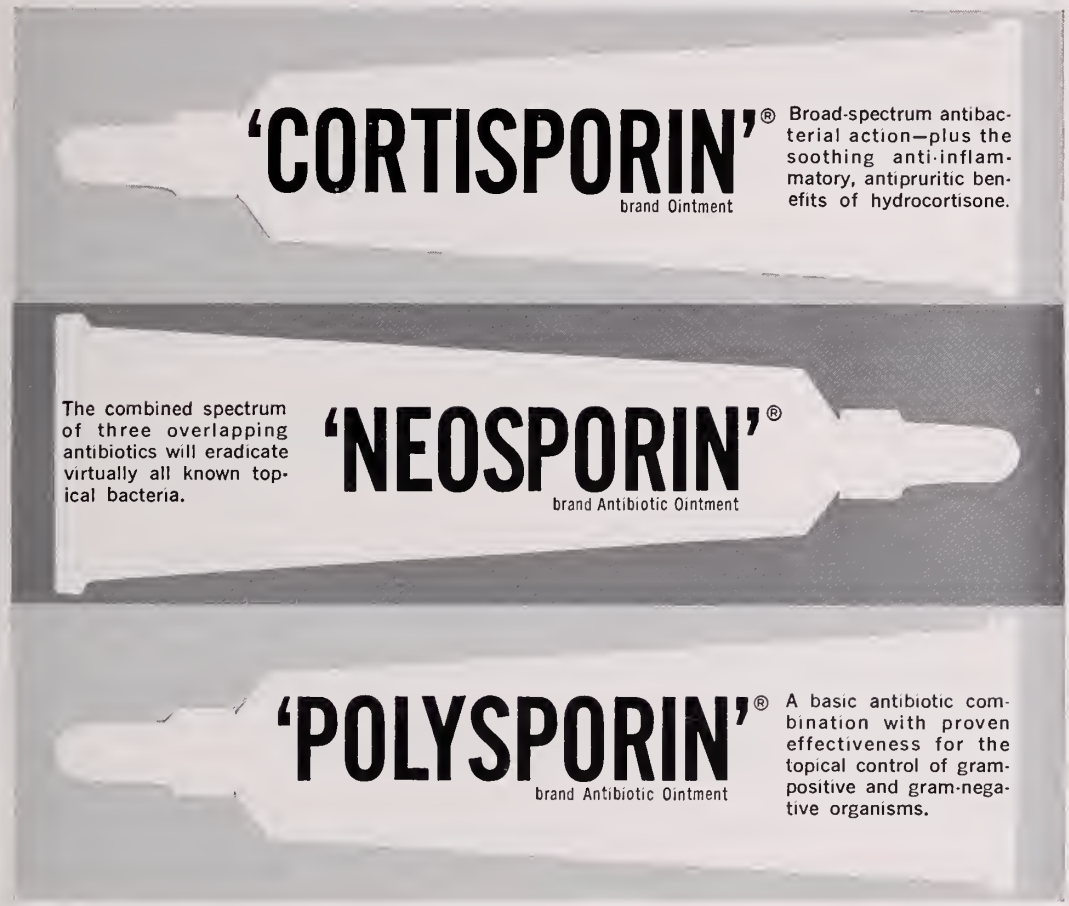
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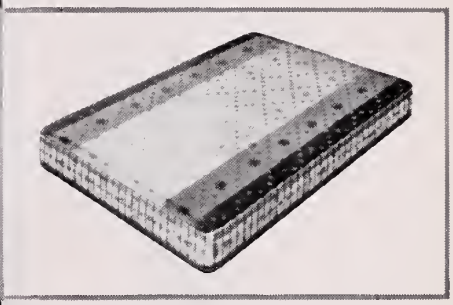
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concluded from page 330

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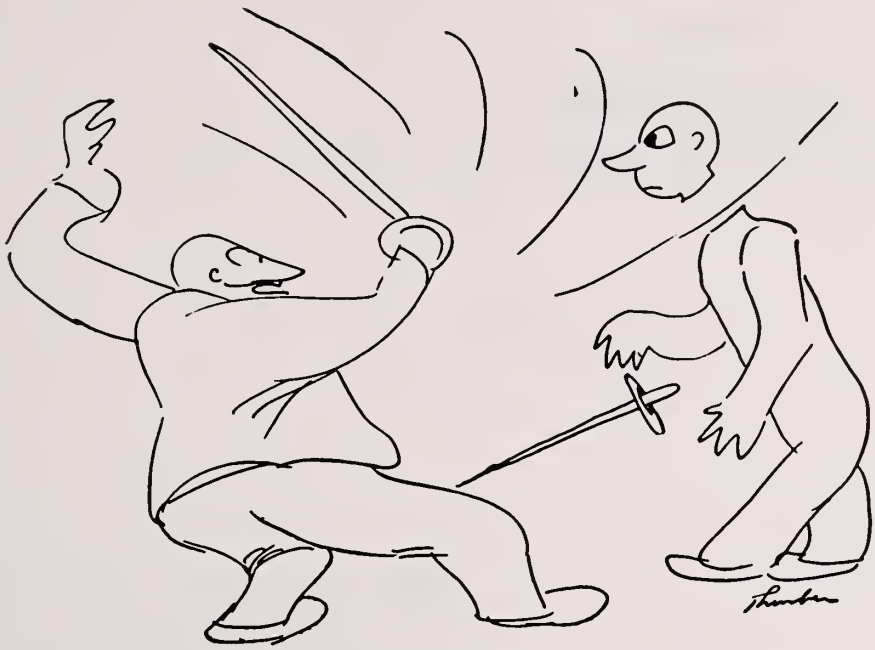
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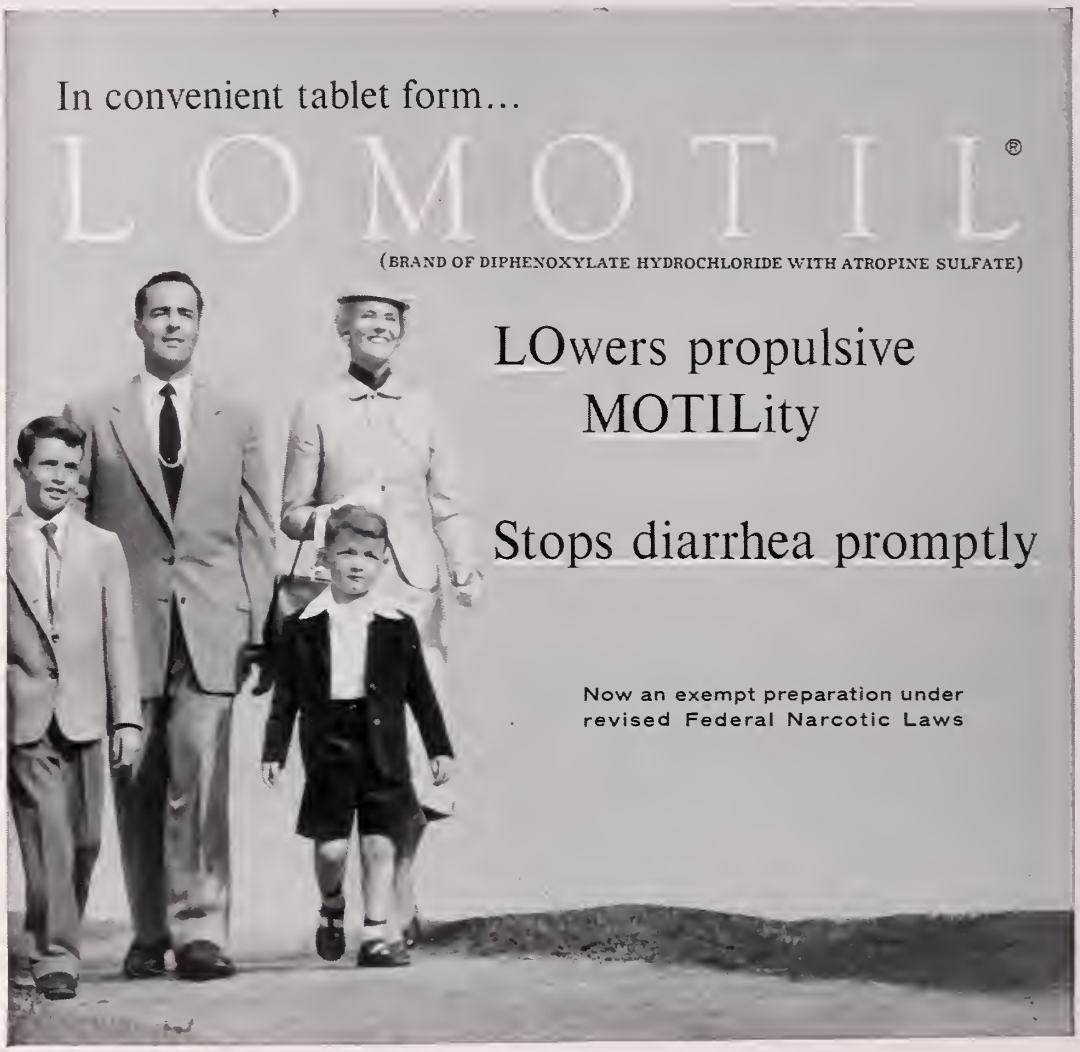
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The RHODE ISLAND MEDICAL JOURNAL

VOL. XLIV JUNE, 1961 NO. 6

RHODE ISLAND POLIOMYELITIS, 1960

Preliminary Report*

JOSEPH OREN, M.D.; RAYMOND F. MCATEER, M.D., AND ROBERT E. SERFLING, PH.D.

The Authors. *Joseph Oren, M.D., of Atlanta, Georgia. Chief, Poliomyelitis Surveillance Unit, Epidemiology Branch, Communicable Disease Center, Atlanta, Georgia.*

Raymond F. McAteer, M.D., Assistant Director of Health (Local Health Services), Rhode Island Department of Health, Providence, Rhode Island.

Robert E. Serfling, Ph.D., of Atlanta, Georgia. Chief, Statistics Section, Epidemiology Branch, Communicable Disease Center, Atlanta, Georgia.

DURING THE SUMMER of 1960, the State of Rhode Island suffered its first poliomyelitis epidemic in five years. This epidemic had an early onset and peak and declined rapidly prior to the epidemic season of past years. Cases tended to be relatively concentrated in several crowded, lower socio-economic areas, especially in several housing projects. Within these areas, the disease seemed to spread rather easily, but transmission to more peripheral areas was quite limited.

The Rhode Island Department of Health recognized in early June that the occurrence of cases was excessive and invited the Communicable Disease Center of the Public Health Service to participate in epidemiological studies. Therefore, a team of investigators was promptly detailed to assist in studying all suspected cases and their environment, as well as the infectious agents and their transmission. This team investigation, which lasted from mid-June until mid-September, has resulted in several findings of interest. The present report deals with preliminary analyses of these data. At this time, it is evident that the pattern of poliomyelitis, as it appeared in Rhode Island in 1960, was quite different from that generally seen in the past.

Methods

During the epidemic investigation, a total of 121 cases of diagnosed or suspected poliomyelitis was carefully studied. One hundred and three of these, including practically all of the paralytic cases, were reported to the state. History and physical and laboratory findings were recorded. A visit was made to each family in which there was a case, in order to study the vaccination status, the home environment, and any possible case contact or source of infection. Laboratory specimens for virologic diagnosis were collected in 90 per cent of the cases. Subsequently, each case received a convalescent evaluation to ascertain the degree of residual paralysis. These follow-up examinations were done sixty days or longer after onset in all but one patient (who moved out of state). At this preliminary stage, on the basis of residual paralysis at sixty days or longer after onset, a strong probable diagnosis of poliomyelitis has been made in seventy-three cases. Thus far, approximately three fourths of these cases have been further confirmed by the isolation of poliovirus type I in the laboratory. In addition, twenty-seven of the cases with no residual paralysis were confirmed as nonparalytic poliomyelitis by poliovirus isolation.

At the end of June and in early September, surveys of the vaccination status of the population of Providence were carried out. The levels of vaccination of various groups were ascertained both early and late in the course of the epidemic in order to evaluate the degree of utilization of vaccine. Other detailed surveys were also done in several housing projects in Providence and Pawtucket in order to measure the protective effectiveness of Salk vaccine. Several other studies were carried out, the results of which will be the topics of subsequent publications. Members of the Kansas City Field Station of the Public Health Service investigated the spread of poliovirus within families and to family contacts. Also, during the epidemic and continuing thereafter, specimens of sewage were collected from a number of sites in Providence and Pawtucket in order to demonstrate the prevalence and spread of enteroviruses in epidemic situations. These specimens were repeatedly collected from a

continued on next page

*From the Communicable Disease Center, U.S. Public Health Service, Department of Health, Education and Welfare, Atlanta, Georgia, and the Communicable Disease Control Division, Rhode Island Department of Health, Providence, Rhode Island.

number of sewer mains draining from relatively homogeneous social and economic sections.

Results: The Epidemiologic Study

The incidence of poliomyelitis in Rhode Island has been quite variable in the past two decades (Table 1). Periodic high-incidence years occurred during the 1940's, followed by a series of epidemic years in the early 1950's. Then, low incidence years, 1956 through 1959, were followed by last summer's epidemic with an attack rate of twelve cases per 100,000. As is usual in temperate climates,[2] the epidemics of earlier years tended to rise during July and August, reach a peak in late August and early September, and decline gradually during the fall. In Figure 1, the weekly incidence curves of polio during the epidemic years of 1953 through 1955 are graphed, and superimposed is the comparable curve for 1960. Since these graphs show cases by week of report, they can only approximate the true occurrence of cases. Nevertheless, it is clear that the 1960 epidemic has a very different pattern, rising rapidly during June and July, reaching an early peak in late July, and then falling off much more rapidly than in previous years.

In the histogram (Figure 2), the epidemic is more accurately described, showing cases by week of onset. Of the 121 cases studied, eighty-six had a preliminary diagnosis of paralytic poliomyelitis and thirty-five were nonparalytic. The precipitous decline in cases after the July peak is seen again for the state as a whole, and it is even more dramatic in the histogram of Providence cases. The epidemic in Pawtucket followed a similar pattern. However, the first cluster of cases in Pawtucket was entirely limited to the Prospect Heights housing project, while the subsequent cases were scattered. Outside of these two metropolitan concentrations, cases were more widely distributed, both temporally and geographically.

The level of Salk vaccination within Rhode Island and within Providence was generally quite high prior to the epidemic. From 1955 through May of 1960, approximately 1,800,000 doses of poliomyelitis vaccine had been shipped into the state. During the epidemic season of 1960, from June through September, an additional 500,000 doses of vaccine were distributed. Approximately 300,000 doses were dispensed via free clinics throughout the state, and another 200,000 doses were dispensed via private practitioners. As indicated in the graph (Figure 3), the greatest proportion of this vaccine was distributed during July, immediately prior to the sudden fall-off in the epidemic. Previous to the large-scale immunization campaign, the vaccine had not been uniformly utilized, and there were pockets of poorly vaccinated groups who remained susceptible to disease. The massive number of immunizations given during the epidemic weeks, which did reach the previously unvaccinated groups, seemingly decreased the number of susceptibles to a point below which the epidemic could no longer spread. In this way, vaccine was probably instrumental in shortening the epidemic.

The distribution of poliomyelitis in Rhode Island in 1960, in contrast to previous years,[3] was not uniform. A large majority of cases, both paralytic and nonparalytic, was localized within the greater metropolitan area, with very few occurring in the less populous and more peripheral areas

TABLE 1
ANNUAL POLIOMYELITIS RATES, RHODE ISLAND

Year	Population*	Reported Cases[1]	Attack Rate†
1940	719,000	16	2.2
1941	731,000	37	5.1
1942	748,000	6	0.8
1943	760,000	186	24.5
1944	795,000	13	1.6
1945	776,000	9	1.2
1946	770,000	88	11.4
1947	776,000	137	17.7
1948	787,000	8	1.0
1949	801,000	157	19.6
1950	777,000	55	7.1
1951	776,000	15	1.9
1952	796,000	114	14.3
1953	814,000	295	36.2
1954	818,000	123	15.0
1955	827,000	422	51.0
1956	846,000	9	1.1
1957	857,000	0	0
1958	865,000	3	0.3
1959	875,000	10	1.1
1960	859,488	103	12.0

* State populations based on census estimates.
† Case rate per 100,000 population.

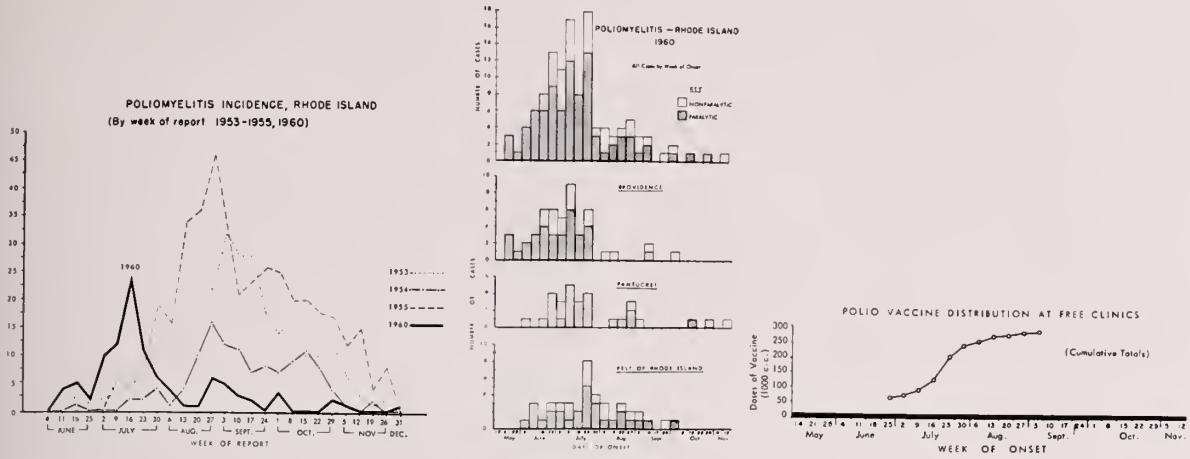


FIGURE 1
Annual Poliomyelitis Incidence, Rhode Island by Week of Report: 1953-1955, 1960

FIGURE 2
Poliomyelitis, 1960, by Week of Onset in Rhode Island, Providence and Pawtucket

FIGURE 3
Polio Vaccine Distribution at Free Clinics in Rhode Island, Cumulative by Weeks, During the Epidemic



FIGURE 4
Geographic Distribution of Poliomyelitis Cases, Rhode Island, 1960

FIGURE 5
Poliomyelitis Distribution in Providence, Rhode Island, 1953, 1955 by Census Tract

FIGURE 6
Poliomyelitis Distribution in Providence, Rhode Island, 1960 by Census Tract (according to preliminary diagnosis)

(Figure 4). Almost two thirds of all cases were located in the Providence and Pawtucket metropolitan concentrations. Relatively few cases occurred in the adjacent areas of Massachusetts. There was, however, some concentration of cases in western Connecticut, in the Groton-New London area early in the summer and in the more rural Windham County area later in the summer.[4]

On the basis of detailed surveys, the census tracts in Providence were classified according to socio-economic level. The lower socio-economic tracts are concentrated largely within the central part of the city and in South Providence. During the years preceding the introduction of Salk vaccine, poliomyelitis epidemics were widely and relatively uniformly distributed throughout the city without preference for any social or economic groups (Figure 5). In comparing the spot map for 1960 with those for 1953 and 1955, it is evident that the distribution is no longer uniform (Figure 6). Rather, the 1960 cases were almost entirely localized within the census tracts with lower and lower-middle socio-economic classification. A concentration of cases occurred in the Chad Brown housing

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project in north central Providence, and there was a relative concentration in South Providence. The degree to which the upper economic areas were spared is most remarkable. It is of great importance that the surveys clearly demonstrated that the lower socio-economic areas of the city were less well vaccinated than the upper areas.

In the detailed laboratory and clinical study of the 121 cases with suspected poliomyelitis, one hundred have thus far been confirmed. Another seven cases have been diagnosed as aseptic meningitis due to other than poliovirus etiology, including mumps, ECHO and Coxsackie viruses. Nine cases with the aseptic meningitis syndrome did not have laboratory specimens submitted. Several cases are still under study. The remainder of this discussion will deal with the 100 cases confirmed as poliomyelitis, omitting thereby those due to other than poliovirus etiology.

As in most series, this outbreak involved males more commonly than females.[5] However, in Rhode Island the 1960 incidence was perhaps more disproportionate than usually seen; fifty-nine per cent of the cases were in males and only 41 per cent in females. Among children under ten years of age, fifty cases were in males and only thirty-five in females. All major ethnic groups in the population were involved, with relatively large numbers of cases in children of French, Italian, English, and Irish descent. There were only three cases in Negroes, quite proportionate to the low Negro population of Rhode Island.

There was a relative predominance of cases among young children in the pre-school age group, a more "infantile" type of disease than was seen a decade ago when the majority of cases was in the school age population.[6] The great proportion of cases among young children is emphasized by the fact that 85 per cent of the paralytic cases were in children under ten years of age (Table 2). Although the number of cases confirmed as nonparalytic poliomyelitis is small, it is noteworthy that the age distribution is very similar, with 85 per cent of the cases also under ten years of age. It has generally been assumed that nonparalytic poliomyelitis involves an older age population[7] than the paralytic disease. However, when cases due to other causes of aseptic meningitis are eliminated, it is seen that the true poliomyelitis cases have essentially the same age distribution, whether paralytic or nonparalytic.

Of great importance in Table 2 is the distribution of cases by vaccination status. More than 56 per cent of the paralytic cases had had either no doses or only one dose of vaccine. On the other hand, twenty-six per cent of the cases had had three or more doses. These percentages are quite comparable to the national percentages of cases among vaccinated and unvaccinated.[8] Before assuming that the number of vaccine failures is excessive, it is necessary to consider not only the number of cases in each group, but also the number of persons at risk in each dosage group. Although a greater proportion of the child-age population

TABLE 2
CONFIRMED POLIOMYELITIS – RHODE ISLAND – 1960
AGE DISTRIBUTION BY VACCINATION STATUS

Paralytic with Residual

Age Group	Doses of Vaccine 0	1	2	3	4	5	Total	Per cent
0-4	12	12	7	4	3	...	38	52.1
5-9	5	7	5	5	1	1	24	32.9
10-14	..		1	3	1	..	5	6.8
15-19	1				..	..	1	1.4
20-29	2	2		1		..	5	6.8
30+	..						...	
Total	20	21	13	13	5	1	73	100.0
Per cent	27.4	28.8	17.8	17.8	6.8	1.4	100.0	

Nonparalytic

Age Group	Doses of Vaccine 0	1	2	3	4	5	Total	Per cent
0-4	4	2	3	1	1	...	11	40.7
5-9	3	2	3	4		...	12	44.4
10-14	..	..	..	1	2	...	3	11.1
15-19	..	..			1	...	1	3.7
20-29		..				...		
30+	..	..				..		
Total	7	4	6	6	4	...	27	100.0
Per cent	25.9	14.8	22.2	22.2	14.8	...	100.0	

had been vaccinated than were left unvaccinated, many more cases occurred in the relatively small unvaccinated group. Thus, the attack rate among the vaccinated was much smaller than the rate among the unvaccinated, and the level of effectiveness of vaccine protection is quite high, as will be demonstrated. It must be mentioned also that Table 2 is somewhat misleading in that it includes all doses of vaccine given to these patients prior to the onset of illness. Thus, six of the twenty-one patients with one dose of vaccine in this table received their vaccine less than one week prior to onset. Also, two of the cases with two doses of vaccine had received their second dose within three days prior to onset. Thus, in these eight cases, the vaccine had been received too recently to have produced significant antibody protection against infection already present.

When all cases were evaluated several months after onset the outcome was generally quite good. Thus, sixty-five of the 100 confirmed cases had no significant residual paralysis. The degree of residual paralysis did not bear any consistent relationship to the previous vaccination status. Fully 37 per cent of the confirmed cases had some degree of bulbar involvement, including twenty-four with bulbo-spinal disease. The more severe results in cases with cranial nerve involvement were entirely limited to those with bulbo-spinal paralysis, and included all six fatal cases. Thirteen cases had bulbar involvement alone, and all had minor or no residual. An unusually large number, twenty-one cases, had facial weakness, including five with isolated facial palsies. It has been suggested that pure facial paralysis is rarely due to poliomyelitis, but in three of these five cases poliovirus has been recovered. Interestingly, three of 17 confirmed cases, originally diagnosed as nonparalytic, had minor residual paralysis. Obviously, paralysis either may not be noted initially or may develop insidiously during the period after preliminary diagnosis is made. This emphasizes the importance of convalescent evaluations in assessing the true morbidity in all cases of poliomyelitis.

The Statistical Study

In the city of Providence, various surveys were made during the course of the epidemic to measure vaccine status and socio-economic levels of subpopulations of the city and of areas selected for sewage sampling.*

The present report provides a summary of findings of a survey conducted in early September, toward the close of the epidemic and the intensive vaccination program. At this time, 1960 census data by enumeration district were available; and, with use of these data, a probability sample of approximately one dwelling unit in 70 in the city of Providence was selected for interview. Information was collected on vaccine status of each household member as of the first of June, July, August, and September. Information was also obtained on the socio-economic status of each household using the two-factor index of social position developed by Doctor A. B. Hollingshead of Yale University.[9] An average value of the index was completed for each census tract by weighting the index for each sample family by the number of family members. The census tracts were then ranked and divided into four quartiles classified as upper, upper-middle, lower-middle, and lower socio-economic levels.

The survey results indicated that a total of 137,534 doses of vaccine were administered to the 206,532 persons in the population. On the average, each person under 20 years of age received approximately one dose. In the age group 20-40 years, an average of approximately three doses was received by each four persons; and, for those over 40, the average was approximately two doses for each five persons.

It was found at the close of the epidemic (considering previous as well as recent vaccination) that very few children had not received at least one dose of vaccine. In the age group 5-14 the percentage with one or more doses was nearly 100 per cent of the population in each socio-economic area. Under five years of age, the percentage with one or more doses was over 90 per cent in each socio-economic area.

When the percentage with four or more doses was examined by age and socio-economic level, a less favorable result was found. Among children under five years, the percentage with four or more doses ranged from approximately 30 to 60 per cent by socio-economic group. Among children 5-14 years, corresponding percentages ranged from 60 to 80 per cent. In the age-group 15-39, the percentage with four or more doses ranged from approximately 40 per cent to 70 per cent. Thus, although in terms of persons receiving at least one dose the population was well-covered at the end of the epidemic, there remained need for considerable effort to complete the immunization series for many persons who received their first (or first and second) inoculations during the epidemic period.

The survey data also enabled calculation of vaccine effectiveness estimates. For this purpose, the population was classified by vaccination status according to age and socio-economic level as of June 1 and July 1. Attack rates in the unvaccinated were then calculated for the periods May 16

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*These surveys were carried out under the directions of Doctor Dana Quade, Epidemic Intelligence Officer, Communicable Disease Center, with support and assistance of the Rhode Island State Health Department and the City of Providence Health Department.

through June 15 and June 16 through July 21. From these rates an expected number of cases in the vaccinated (three or more doses) were calculated for each sub-population in each time period. The total number of expected cases in the vaccinated was 31, with six cases observed. Effectiveness was thus calculated as follows:

$$\frac{31 - 6}{31} \times 100 = 81 \text{ per cent.}$$

This result is similar to effectiveness estimates made in the 1959 poliomyelitis epidemics in Des Moines and Kansas City.[10,11,12]

Summary and Conclusions

The poliomyelitis epidemic of 1960 in Rhode Island followed a different pattern than epidemics in past years. The distribution of cases, both geographically and temporally, was atypical. After a rapid early season rise, the epidemic declined dramatically. Furthermore, cases were remarkably concentrated within lower socio-economic census tracts and housing projects within the metropolitan Providence area. It is felt that these epidemiologic characteristics were determined, at least in part, by the massive vaccination program within Rhode Island preceding and during the epidemic.

There was a predominance of cases among poorly immunized young children, with 85 per cent of both paralytic and nonparalytic cases under 10 years of age. Three fourths of the paralytic cases had had no vaccine or inadequate vaccination. However, the degree of residual paralysis bore no relationship to the previous vaccination status of the patients. The better vaccinated areas of Providence were consistently spared.

Clinically, two thirds of the cases had no significant residual paralysis. There was a high incidence of bulbar, and especially facial, involvement. Poliovirus type I was isolated from a great majority of cases, including several with isolated facial paralysis.

Surveys of vaccination status in Providence indicated a very wide distribution of Salk vaccine. However, considerable effort still is needed to fully immunize the susceptible population.

The effectiveness of Salk vaccine in the 1960 epidemic, for three or more doses, was 81 per cent.

Bibliography

[1] Reported Incidence of Selected Notifiable Diseases: Vital Statistics Special Reports 37(9):207-209, June 15, 1953

[2] Thrupp, L. D.; Forester, H. E., and Brody, J. Q.: Poliomyelitis in the United States, 1957. Public Health Rep. 74:535, 1959

[3] Lehman, S. F.: The 1953 Outbreak of Poliomyelitis in Rhode Island. Rhode Island Med. J. 37:259, 1954

[4] Rindge, M. E.: Poliomyelitis in Connecticut, 1960. Conn. Health Bull. 75(4):111, 1961

[5] Nathanson, N.; Thrupp, L. D.; Hall, W. J.; Langmuir, A. D.; Cornell, R. G.; Forester, H. E.; Church, R. E.; Hall, J. B.; Hilderbrand, M.; Shaughnessy, H. I.; Morrissey, R.: Epidemic Poliomyelitis During 1956 in Chicago and Cook County, Illinois. Amer. J. Hyg. 70:107, 1959

[6] Dauer, C. C.: The Changing Age Distribution of Paralytic Poliomyelitis. Ann. N. Y. Acad. Sci. 61:943, 1955

[7] Hall, W. J.; Nathanson, N., and Langmuir, A. D.: The Age Distribution of Poliomyelitis in the United States in 1955. Amer. J. Hyg. 66:214, 1957

[8] Public Health Service, U. S. Department of Health, Education, and Welfare: Morbidity and Mortality Weekly Report 10(15):2, Apr. 21, 1961

[9] Hollingshead, A. B.: Two Factor Index of Social Position. A. B. Hollingshead, New Haven, Conn., 1957

[10] Speers, J. F.; Chin, T. D. Y.; Marine, W. M.: Hall, E. C.; Gravelle, C. R.: Epidemic Poliomyelitis, Des Moines, Iowa, 1959. J.A.M.A. 174:864, 1960

[11] Marine, W. M.; Chin, T. D. Y.; Gravelle, C. R.; Soergel, M. E.: Effectiveness of Salk Vaccine in Reducing Nonparalytic Poliomyelitis in a Large Urban Epidemic. New Eng. J. Med. 264:903, 1961

[12] Serfling, R. E., and Langmuir, A. D.: Simple Mathematical Model of Bias Arising from Effectiveness Rates Calculated from Heterogeneous Populations with Some Error in Diagnosis, read before the joint meeting of the Biometric Society (ENAR) and the Institute of Mathematical Statistics, Columbia University, New York City, April 21, 1960

DID YOU KNOW?

- That as of the end of 1960, an estimated 132 million Americans had hospital insurance, compared to 77 million at the end of 1950.
- That from 1950 to 1960 the growth in surgical insurance coverage was from 54 million persons to an estimated 120 million persons.
- That in the 10-year period there was an increase from 22 million to an estimated 86 million in the number of persons with regular medical insurance which helps pay for doctor calls and other non-surgical care by physicians.
- That some 25 million persons now have major medical coverage compared to about 100,000 in 1950.
- That the number of persons with loss of income insurance increased from 38 million in 1950 to 43 million.

MACHINE SALES DATE 2,200 YEARS

The sale of accident insurance policies in vending machines is the latest development in a history of automatic merchandising which started about 200 B.C.

The first vending machine dispensed holy water in a Greek temple. In the early 1800's, bulk tobacco was automatically merchandised in English pubs.

Vending machines dispensing penny gum and chocolate bars in packages, and salted peanuts and ball gum in bulk, first appeared in the United States in the late 1880's.

VITAMIN C DEFICIENCY MASQUERADING AS "ARTHRITIS"

MICHAEL G. PIERIK, M.D.

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A SIGNIFICANT NUMBER of patients referred for evaluation of "arthritis" will ultimately prove to have musculoskeletal or neuritic symptoms due to unrelated disease. That pulmonary neoplasm or lupus erythematosus may produce peripheral arthropathy is well recognized. The association of thyrotoxicosis and subdeltoid bursitis is another example. Hence, a basic proficiency in diagnostic internal medicine would seem to be a prime requisite in the practice of rheumatology. The following case illustrates another disease still occasionally seen in which a correct diagnosis led to a gratifying cure and rehabilitation.

Case Report

W. M., a sixty-nine-year-old white female, was first seen in St. Joseph's Hospital in December, 1957, with characteristic findings of acute thrombophlebitis of the right lower leg. Conservative management consisting of elevation, moist heat, and anticoagulants was successful. The patient was then referred for evaluation of arthritic complaints. The history was of bizarre generalized musculoskeletal aching, with extreme tenderness in the muscles of the arms, legs, and low back for some four years. Actual swelling, increased heat, redness, or limitation of any joint was denied. For the past year, extreme subjective weakness had led to a bed and chair existence. Profound anorexia and mental depression accompanied this. Physical examination, X rays of affected bones and joints, and laboratory studies were normal except for a hypochromic anemia of 10.5 grams of hemoglobin. The patient's symptoms were thought to be functional, secondary to long standing mental depression. With supportive psychotherapy and graduated physiotherapy, the appetite returned to normal. In six weeks all symptoms of pain were gone and the patient walked normally at the time of discharge.

The second admission in December of 1960 was occasioned by a fall with ensuing severe pleuritic chest pain and tenderness. There was a history of gradual development of anorexia and mental depression, similar to that of the first admission. The patient had been forced to return to a wheel chair for the past year. A careful dietary history indicated a nearly complete avoidance of meat, vegetables, and fruit, canned or fresh, for at least eighteen months. Intake had been limited to tea, toast, cereals, and custard. Alcoholism, prolonged medication, or exposure to toxic chemicals were denied by the patient and close relatives. Purpura on the lower extremities and forearm had developed spontaneously in the past twelve months. As on the previous admission, peripheral muscular tenderness was prominent.

Physical Examination: The patient was sallow, edentulous, emaciated, mentally depressed, but well oriented. She complained of extreme left lateral pleuritic chest pain. An enormous ecchymosis extended from the left axilla to the pelvic brim. Purpura ranging in size from a quarter to a half dollar were noted on the extensor surfaces of forearms and lower legs. Folliculitis was not present. Light pressure along the lower tibiae was exquisitely painful. All neurological modalities, both sensory and motor, were intact, except for profound muscular weakness of the legs. There were no signs of rheumatoid or other arthropathy. The remainder of the examination was normal.

X rays revealed multiple recent left lower rib fractures. Views of the long bones were normal. The tourniquet test was normal. Aside from a hypochromic anemia of 11 grams of hemoglobin, all laboratory studies, including coagulation tests were normal. The patient was afebrile throughout her stay.

Because of the unexplained purpura, long bone tenderness and nutritional history, Vitamin C metabolic tests were done while maintaining the patient on an ascorbic acid poor diet:

Fasting Plasma Vitamin C Level	112 micrograms %
Buffy Coat Vitamin C Level	8 milligrams %

(Method using dinitrophenyl hydrazine was followed)

The following hourly plasma levels were obtained after a single oral dose of 800 mgm. of ascorbic acid:

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First Hour	112 micrograms %
Second Hour	157 micrograms %
Third Hour	180 micrograms %
Fourth Hour	146 micrograms %

Because of the severity of the symptoms due to the fractures, it was not deemed advisable to delay healing to undertake a tyrosine loading determination. Oral ascorbic acid, 50 mgs. daily, was started, in addition to a full diet. At the end of ten days, there was complete clearing of mental depression, muscle weakness, periosteal tenderness, and purpura, in that order. Gait was normal at discharge on the 19th hospital day. Fasting plasma ascorbic acid level, just prior to discharge, was 2.24 mgm.%. The fractures healed uneventfully and the patient has remained well to date.

Comment

Florid or "full blown" scurvy[1] is characterized by hemorrhagic phenomena, particularly in the gingivae, periosteum, and mucous membranes. Hematuria, anemia, and delirium in late stages are seen. The disease should be considered in any case of unexplained bleeding. In subclinical or less advanced cases, insidious weight loss, progressive weakness, objective bone tenderness, and diffuse subjective aching in arms and legs, are suggestive clues. Recognition at this stage is important to proper wound and fracture healing. A low serum ascorbic acid level without clinical signs or symptoms, of course, is not diagnostic. Loading tests are useful in doubtful cases, and finally the response to specific therapy may be the best guide. The disease is more striking in children; women seem more resistant than men. Gingivitis is not present in edentulous patients. Of some interest is the negative capillary fragility test in this case. However, negative tests have been found for as long as six months in experimental diets totally deficient in vitamin C.

SUMMARY

A cure of "arthritis" was possible by a belated recognition of an early symptomatic stage of Vitamin C deficiency. A negative capillary fragility test and absence of gingivitis were noteworthy features.

Reference

[1]Crandon, J. H.; Lund, C. C., and Dill, D. B.: Experimental Human Scurvy, New England J. Med. *223*:353, Sept. 5, 1940

May 8 and 9, 1962

151st ANNUAL MEETING

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AINHUM

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IN THE NEW ENGLAND AREA a tropical disease can be easily misdiagnosed simply because one is unaware of its existence; an example of this is ainhum. Ainhum (dactylolysis spontanea) is a disease peculiar to Negroes, characterized by development of a fibrotic band of the toes usually forming at the base of the fifth toe. This condition mainly affects Negro males of the tropics and subtropics and it is only rarely seen in the temperate regions of the world. Clark[1] in 1860 was the first to report this condition in the African Gold Coast Negroes as being one of dry gangrene of the little toe. daSilva Lima[2] in 1867 first introduced the African word ainhum, which means "to saw," to classify this disease. In 1881 Hornaday[3] reported the first case from this country, and since that time approximately 100 reported cases have been added to the world literature from the United States.

Various etiological entities have been reported as being the underlying cause for this disease: leprosy, syphilis, infection and trophoneurosis, just to mention a few. However, none of these conditions is consistently present, nor can they explain the reason ainhum most frequently attacks the small toe of the Negro male. This multiplicity of unproven etiological causes is therefore an indication that the basic pathology for this condition is as yet unknown.

The disease is characterized by a transverse furrow which usually develops in the region of the digito-plantar fold of the fifth toe. A small papule may appear in the region of this fold which on occasion becomes secondarily infected. This may become painful and for the first time attract the attention of the patient to the change that is taking place. With the passage of time the transverse band begins to extend laterally until it eventually encircles the entire toe. The fibrotic constriction then in effect becomes a ligature which, with increased constriction, slowly cuts off the distal blood supply. Eventually absorption of bone takes place beneath the constricted area; and in the end stages dry gangrene results, with autoamputation occurring distal to the fibrotic band.

Grossly one finds the toe distal to the fibrosis to be bulbous, edematous, and on occasion discolored from gangrene. The tissue changes directly beneath the constricting band as well as any degree of bone absorption is dependent upon the duration and extent of the fibrosis. This fibrotic process results in minimal to complete occlusion of the underlying blood vessels resulting in the trophic changes that occur.

In untreated cases, autoamputation is usually the end result. Likewise, the only effective therapy for this condition in the light of our present knowledge is amputation of the involved toe. Brown[4] in 1959 reported a case of bilateral ainhum which he treated by multiple Z-plasties with favorable results. Nevertheless, one wonders whether plastic procedures are justified in a condition that is solved so easily by amputation of a toe that is already partially destroyed. The loss of a fifth toe on either foot is in no way a handicap.

Case History

G.H. is a seventy-two-year-old Negro female housewife who entered the hospital complaining of "cracking and swelling" of the fifth toe of her right foot. Her entire life had been spent in the New England area. Approximately one year prior to admission, she began to notice cracking of the plantar surface of her fifth right toe which over a period of time became quite painful. She was seen by her family physician who felt her condition was one of "athlete's foot" and treated her with epsom salt soaks of both feet. This treatment was carried out for a period of one month, at the end of which time "pus" escaped from the involved area and the pain disappeared. She then remained asymptomatic until three months prior to admission at which time she again noticed a painful furrow forming in the previously affected area of her fifth right toe. This furrow began to extend laterally until the entire toe was encircled, eventually leading to swelling and gangrene of the portion of the

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From the Department of Surgery, Pawtucket (Rhode Island) Memorial Hospital.

toe distal to a fibrotic band. It was at this time that she came to the hospital for definitive treatment.

On physical examination the patient was a well-nourished Negro female complaining of pain in her right fifth toe. This toe was bulbous and black distal to the characteristic constricting band (Fig. 1). Palpation of this toe caused marked discomfort. The dorsalis pedis and posterior tibial pulses were present bilaterally. The remainder of the physical examination was remarkable only for bilateral cataracts, Grade 2 arteriosclerotic retinopathy, and external hemorrhoids. Roentgenograms of the involved area showed bone atrophy of the distal portion of the proximal phalanx of the right fifth toe (Fig. 2). The results of the blood and urine studies were within normal limits. The serum test for syphilis was negative. The patient subsequently underwent amputation of the right fifth toe which was performed under a spinal anesthesia. The postoperative course was uneventful with the wound healing by primary intention.



FIGURE 1

Photographs taken at time of amputation of the fifth toe. Constricting band can be seen at proximal end of involved toe.



FIGURE 2

Comparison roentgenograms showing constriction of proximal portion of right fifth toe with underlying bone destruction.

SUMMARY

Ainhum is a disease seen mainly in Negroes from tropical and subtropical areas of the world, appearing only rarely in patients from the temperate climates. Many theories have been proposed regarding the etiology of this condition but none of them has been proven. The disease usually constricts the fifth toe at the base with eventual bone atrophy and gangrene. The treatment of this condition is amputation.

References

[1]Clark, R.: Remarks on the Topography and Diseases of the Gold Coast, West Coast of Africa. Tr. Epidemiol. Soc. London 1:76, 1863

[2]daSilva Lima, J. F.: On Ainhum. Arch. Dermat. 6:367, 1880

[3]Hornaday, E. H.: Ainhum. Tr. M. Soc. North Carolina. 28:76, 1881

[4]Brown, E. C.: Bilateral Ainhum Treated by Multiple z-Plasties. Plast. & Reconstruct. Surg. 23:550, 1959

[5]Bergner, L. H.; Winfield, J. M.: Ainhum (Dactylolysis Spontanea) Review of the Literature and Report of a Case. Am. J. Surg. 100:480, 1960

[6]McKenna, C. M.; Hermann, R. E.: Ainhum — Occurrence of a Case in Northern Ohio. J.A.M.A. 173:1015, 1960

[7]Chancey, R. L.; Gipson, B. F.: Ainhum. U.S. Armed Forces M. J. 7:101, 1956

[8]Riley, L. H.; Cantrell, J. R.: Clinical & Pathological Observations in Three Cases of Ainhum. Arch Surg. 79:165, 1959

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Progress Notes . . .

NEWER ADVANCES AND PRESENT-DAY PROBLEMS IN GASTROINTESTINAL SURGERY*

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I SHALL PRESENT my personal evaluation of those *Newer Advances and Present-Day Problems in Gastrointestinal Surgery* with which I have had some personal experience. Advances have been made, as can be seen from Table 1, of the approximate operative mortality rates at my institution in 1930, when I was a house officer, and again in 1960.

TABLE 1

Operative Mortality Rate	1930	1960
Peptic Ulcer Operations	10%	1%
Gastric Malignancy Resections	25%	5%
Gallbladder Operations	10%	0.5%
Resection of Colon and/or Rectum	30%	1%

I credit these to the following developments.

The presence of scientific anesthetists, better anesthetics and apparatus, and endotracheal intubation need no comment.

Nasogastric intubation has been particularly helpful in minimizing anastomotic leaks in gastric resections and in practically eliminating postoperative paralytic ileus which was particularly common and fatal after operations on the gallbladder.

More accurate fluid, electrolyte, and blood replacement has also been a big factor and will be commented on again in a moment. The use of antibiotics and bowel preparation has been to a considerable degree responsible for the general decrease in mortality on operations of the colon and rectum.

A still existing serious problem that has not been satisfactorily solved is the estimation of blood volume before and after operation because patients may die either from too little or too much fluid and blood replacement. At present we have found the radioactive chromate 51 method of determining blood volume to be the most useful. It is run by the house officers, obtains blood volume determinations in about ten minutes, and is repeatable in about four hours. I have had several cases in which I am certain that these determinations prevented our giving too much or too little fluid to a critically ill patient in whom the mistake would have been fatal.

Esophagus

The treatment of carcinoma of the middle and upper thirds of the esophagus is still an unsolved problem. The operative attack is one of great magnitude. In my hands it has not been satisfactory.

I resected sixteen cases with no five-year survivals. The next forty cases were treated by rotation X-ray therapy and again there were no five-year survivals. However, more patients survived for a longer time than with surgery and all were able to swallow until their demise. This seemed to me to be better palliation than I was able to give by surgery, and in addition it spared them both the expensive hospitalization and suffering that surgery produced. We are now treating these patients with cobalt radiation. This has started too recently for me to have any statistics. I do not mean that surgery should be abandoned by all people in treating this disease. Sweet in Boston and Parker in Charleston as well as others have produced some five-year cures. They are concentrating on this field and may eventually produce a satisfactory procedure that all of us can use. In the hands of the ordinary general surgeon the results are not good.

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TABLE 2

Carcinoma of Middle and Upper Thirds of Esophagus

Treatment	Total Cases	Survival				
		Average	5 yrs.	2 yrs.	1 yr.	6-12 mos.
Surgical	16	9 mos.	0	0	1	6
Rotational X-ray	40	7.9 mos.	0	4	5	14

*Presented before the House Officers' Association at Rhode Island Hospital, Providence, Rhode Island, May 5, 1961.

On the other hand carcinoma of the lower third of the esophagus has a much more favorable outlook when attacked by surgery. This is shown in Table 3 of my results in an admittedly small series:

TABLE 3
Carcinoma of Lower Third of Esophagus

Total Number of Cases	6
Operative Mortality	0
Died with Metastases but palliated 11 months, 4 yrs.	3
Living and well for 4 yrs.	2
Living and well for 5 yrs.	1

I think that these patients should be treated by surgery.

Stomach

Carcinomas of the stomach are still a serious problem. In our opinion a subtotal gastrectomy is the treatment of choice, but a total gastrectomy is used when a safe margin above the tumor cannot otherwise be obtained. The five-year survival for curative resections runs between forty and fifty per cent, but the discouraging fact is that the over-all five-year survival is only five to ten per cent because such a large percentage of these patients come in with a tumor that is nonresectable or amenable only to a palliative resection. I might add that we believe in palliative resection for a resectable tumor even in the presence of metastases, unless they are so extensive that the life expectancy is short. Removal of the primary tumor prevents its future bleeding or obstruction and makes the patient much more comfortable for his remaining days.

The results in the treatment of sarcoma of the stomach are considerably better than those of carcinoma. We[1] recently reviewed our primary sarcomas of the stomach. They consisted of three types: reticulum cell (large pleomorphic cell) sarcomas, lymphosarcomas (small round cell), and leiomyosarcomas (spindle cell).

Reticulum cell sarcomas commonly develop lymphatic metastases, though not as commonly as carcinomas. These tumors were moderately sensitive to radiation therapy. The most successful form of treatment was resection plus postoperative radiation. Those that were nonresectable responded to a variable degree to radiation and/or nitrogen mustard therapy. Their over-all five-year survival was 40 per cent. Some of the cases that had been resected died of other causes in later years and autopsy showed no evidence of recurrence. All cases treated without surgery died eventually of their disease.

Lymphosarcomas of the stomach were usually associated with involved glands and other structures. They were very sensitive to radiation therapy. The best results followed treatment by resection plus postoperative radiation. Those which were nonresectable responded to radiation and chemotherapy. Their over-all five-year survival was 50 per cent but none was entirely free of their disease nor died without autopsy evidence of disease after any form of treatment.

The leiomyosarcomas of the stomach are the most favorable group of all. They rarely metastasize to the lymph glands; in fact this occurred in only one of the thirteen that we studied. They are completely resistant to radiation and chemotherapy. The best results followed resection of the stomach and its tumor. There is no means of palliating those that cannot be resected. The five-year over-all survival in these tumors was 50 per cent and the five-year survival of those that were resectable was 60 per cent. Furthermore, those that survived for five years were clinically free of the disease and any that died from other causes were shown to have no evidence of recurrence at autopsy. Although it was stated that the prognosis of these tumors is good it depends almost entirely on whether there has or has not been vascular invasion.

Doctor Sumner Wood went over all of our specimens without knowing the clinical outcome of the patients. He found vascular invasion by the tumor in seven cases. Of these seven, six have died of the tumor, and one is still living, four months postoperatively.

On the other hand he could find no vascular invasion in five cases. None of those had died from their tumor; one died a postoperative death; two are living and well for ten and seven years; and two others died from other causes six and three years after their operation, autopsy showing no evidence of recurrence of the tumor. The thirteenth case had too little tumor tissue in the secondarily resected specimen for vascular invasion to be evaluated.

A real lesson can be learned from the thirteenth case. The patient, a female, was first operated upon in another city for upper gastrointestinal bleeding, and a small tumor in her stomach was found. A frozen section was made and interpreted as a benign leiomyoma. Accordingly, it was locally excised with what appeared to be an adequate margin. Later permanent sections showed that it was a leiomyosarcoma. She was transferred to the Johns Hopkins Hospital where a secondary subtotal gastrectomy was decided upon despite the fact that by X-ray and even at operation there was no visible or palpable evidence of persistence of the tumor. The pathologic section showed residual tumor cells at the site of her healed former gastrotomy wound. She was nineteen years' old then, and is now twenty-eight. The moral to this is that even a benign appearing leiomyoma should be widely excised, because one cannot tell whether it is benign

or malignant from the frozen section.

Duodenum

The elective surgical treatment of duodenal ulcer is still an unsettled problem. The argument concerns whether to do a subtotal gastrectomy, or a vagotomy plus a 50 per cent gastrectomy or some shunting operation. The treatment of duodenal ulcer has gone through many fads and cycles and now is about back to where it was thirty years ago. Personally I prefer a subtotal gastrectomy, because it has given me satisfactory results over the years. As the late Knute Rockne used to say, "When your running attack is working why forward pass?" On the other hand vagotomy with a conservative gastrectomy or a shunt operation is gaining popularity at the present time. It does have a lower mortality and seems to give equally satisfactory results. It is possible I may change to it later though I have not so far. The degree of preoperative acidity influences the choice. Of course the primary treatment of a duodenal ulcer is medical. Surgery is reserved for the complications of bleeding, perforation, obstruction, or intractability.

The treatment of a perforated peptic ulcer is also still controversial. I prefer simple suture, with biopsy of any ulcer that is on the gastric side of the pylorus. In our hands this has provided a 1 per cent mortality. A twenty-year follow-up of a series of these patients showed that during the following twenty years 33 per cent had no further trouble, another 33 per cent required medical treatment, and the remaining 33 per cent required reoperation for a peptic ulcer. We reserve immediate resection of a perforated peptic ulcer for young, good risk patients with recent perforation, minimal inflammation about the ulcer, and viscera mobile enough to be easily resected. I firmly believe that one should perform the simplest and safest operation that will take care of the present emergency.

Gastrointestinal Bleeding

Another unsettled problem is the treatment of emergency gastrointestinal bleeding from an unknown source. It is important, when possible, to try to diagnose the source before any operation is performed. The history provides some clue. If there has been hematemesis, suspect a bleeding point proximal to the ligament of Treitz. Perform an emergency barium swallow X-ray study, and/or esophagoscopy if esophageal varices are considered a possibility. If there has been vomiting without hematemesis, then suspect a lesion distal to the pylorus. Again we do a barium swallow X-ray study, a proctoscopic examination, and a barium enema examination. When there has been no vomiting, one must consider a location anywhere in the gastrointestinal tract, but more likely in the lower bowel. For this we do a proctoscopic examination first, then a barium enema, and finally the other studies mentioned above if necessary.

When the site of bleeding is still unknown and emergency operation is necessary, the following routine has been helpful. We look first for the highest level of bluish discoloration of the bowel and then palpate and inspect the gastrointestinal tract at and above that level. We then look at the liver for evidence of cirrhosis and at the omental veins for evidence of distention from portal hypertension. Next the stomach is opened by a long gastrotomy which extends from the cardia through the pylorus if necessary. We then look at the jejunum for diverticula, both false and true, and, if none is seen, isolate the jejunal loop between compression clamps and insufflate it to distend any diverticula that are present to make them more prominent. If there has been no hematemesis, the colon is opened by a colotomy and its interior inspected with a sterile proctoscope as it is distended with air to flatten out the mucosal folds. A blind gastrectomy is not done unless blood was found in the stomach with no specific bleeding area and is not coming up from the pylorus or down from the cardia. One must remember that 25 per cent of upper gastrointestinal bleeders are bleeding from something else than a peptic ulcer.

The treatment of esophageal varices is still a problem. When bleeding is active we insert a Sengstaken tube. If this does not control the bleeding or if the bleeding recurs after the tube is released, I have ligated the varices through a thoracic approach with temporary success. Others have successfully stopped the bleeding by the Tanner operation which consists of transecting the upper end of the stomach. These are not definitive operations. The best procedure apparently for relieving the portal hypertension, which is the cause of varices, is some form of a portacaval shunt. This operation should not be undertaken lightly. Although McDermott[2] has recently reported a brilliant series at the Massachusetts General Hospital with a mortality around 10 per cent, one must remember that he and his associates have had an unusually large experience with the condition. I am quite certain that the mortality will be around 20 per cent when performed by ordinary surgeons who do not specialize in this operation. Furthermore the cases must be carefully selected. Some people advocate an emergency portacaval shunt during the active bleeding. I have not attempted this, so I cannot discuss it.

On the other hand a portacaval shunt that is performed electively can be very beneficial in properly selected cases. There is difference of opinion about the type of shunt to be performed. The choice often will be dictated by the anatomical conditions

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encountered. The most desirable shunt is one between the portal vein and the vena cava. This may be performed as an end-to-side, side-to-side, or double end-to-side. The reason for the side-to-side and the double end-to-side procedure is that it has now been demonstrated that there is a considerable retrograde flow of venous blood from the liver in the portal vein, at least in some cases. However, a side-to-side anastomosis is more difficult to perform than an end-to-side; so the double end-to-side anastomosis has virtue.

The portal vein may be found to be thrombosed and unsuitable for an anastomosis. In such a case an anastomosis can be made between the splenic vein and the left renal vein. This anastomosis does not shunt as much blood as the portal caval anastomosis; and McDermott[2] showed very nicely that there is a greater incidence of recurrence of bleeding after this type of shunt than after the portacaval shunt. We perform portacaval shunts only for patients with esophageal varices that have bled. Some individuals are advocating that it be performed prophylactically before the patient bleeds at all. This is a much debated issue that has not yet been resolved. One must also remember that some patients with esophageal varices never bleed, while some others bleed once or twice and never have a recurrence of the bleeding. They are very much in the minority.

Jejunal false diverticula occur on either side of the mesentery of the jejunum. It has not been generally recognized that they are a potential source of upper gastrointestinal tract bleeding. Hemorrhage from them may consist of simple melena or massive hemorrhage. Clinically they mimic a bleeding duodenal ulcer. They may be seen in a gastrointestinal X-ray series. We[3] reported three of these cases and collected twenty-one others from the literature, in all of which the diverticula were the cause of hemorrhage. The symptoms are listed in Table 4.

TABLE 4
Symptoms of 24 Patients with Bleeding Jejunal Diverticula

Asymptomatic Chronic Melena	5
Asymptomatic Massive Melena	4
Chronic dyspepsia, hematemesis and Melena	3
Pain, Vomiting and Chronic Melena	3
Pain, Vomiting and Massive Melena	3
Asymptomatic Vomiting and Massive Melena	3
Asymptomattic Hematemesis and Massive Melena	1
Asymptomatic Hematemesis	1

The following short case report demonstrates the resemblance to bleeding from a peptic ulcer:

A fifty-eight-year-old white male entered the Perry Point Veterans Hospital in June, 1959. He had been asymptomatic until the sudden onset of syncope, vomiting without hematemesis, and massive melena the previous night. The amount of hemoglobin was only 6 gm. after the transfusion of 2500 ml. of blood. Laparotomy (R.T.S.) was performed and 59 cm. of jejunum containing multiple diverticula were resected. One diverticulum could be seen at operation to be refilling with blood when emptied. No ulceration could be found in the specimen. Recovery has been complete.

An important point about these cases is that at operation you may not easily see the diverticula or, if diverticula are there, their presence does not necessarily mean that the bleeding is coming from them. It is helpful to distend the jejunum with air to visualize them better. If you pinch the diverticula you may start up active bleeding and demonstrate its accumulation in the offending diverticulum.

It is important for pathologists to realize that these are potential sources of gastrointestinal hemorrhage. In any patient who has died from gastrointestinal bleeding without a site of the bleeding having been found at autopsy this segment of the bowel should be blown up with air, otherwise the diverticula may be missed.

Hiatus Hernia

There is still a difference of opinion as to what should be done for hiatus hernias. I agree that hiatus hernias that are asymptomatic need not be operated upon. However those that do have symptoms should be operated upon because in our experience they can develop the complications listed in Table 5.

TABLE 5
Complications of Hiatus Hernia

Non-X-ray — visible esophagitis with bleeding and anemia, all four corrected by hernia repair	4 cases
Esophagitis Stenosis:	3 cases
1 corrected by esophagogastrectomy - Stenosis recurred.	
2 corrected by esophageal resection and jejunal interposition — too recent for evaluation.	
Strangulation with perforation, both fatal.	2 cases

One of the complications is the development of esophagitis that is too mild to be visualized by an X-ray study, but yet is sufficient to cause bleeding or anemia. This is one of the causes to be looked for when one has a patient with melena and anemia of unknown cause. I have had four of these patients, one in my immediate family, all of whom were cured of their bleeding and anemia by repair of the hernia. They have all remained well.

Another serious complication is the development of a severe stenosis due to esophagitis. These cases are much easier to prevent than they are to cure. Operations for correcting esophageal stenosis are not completely satisfactory. I have had three of these patients. In one the stenosis was corrected by esophagogastrectomy, but stricture at the anasto-

TABLE 6

Total Routine and Diagnostic Proctoscopies	546 patients
Positive findings requiring biopsy in 40 patients (7.3%)	
Routine Proctoscopy of Asymptomatic Patients over 40 yrs. old.	
Total routine proctoscopies	448 patients
Total unsuspected positive findings	25 patients
Benign Polyps	23 patients (5.1%)
Carcinoma	2 patients (0.46%)
Proctoscopic Examinations of Patients with Rectal Symptoms	
Number of Diagnostic Proctoscopies	98 patients
Total Positive Findings	15 patients
Unsuspected Benign Polyps	12 patients (12%)
Unsuspected Carcinoma	3 patients (3%)

All were unsuspected Positive Findings in Addition to the Known Hemorrhoids, Fistulas, Fissures, Condylomata, etc. for which they were admitted.

motic suture line recurred within two years. The other two were corrected by a jejunal interposition operation; but this is a difficult procedure. These have been done too recently for me to evaluate the permanent results.

There were two other older patients with strangulation and perforation of their hiatus hernia. Both cases were fatal. It is for these reasons that I advocate that patients with hiatus hernia who have heartburn or other symptoms have their hernia corrected before these complications develop.

Colon and Rectum

Some years ago at the Perry Point Veterans Hospital we commenced the routine of proctoscoping every patient who was over forty years of age and was admitted on the Surgical Service regardless of the nature of his complaints. Proctoscopic examinations of people over forty having no rectal complaints are called routine proctoscopies, while those of people who have some kind of rectal complaint are called diagnostic proctoscopies. The year before last[4] the total of these two groups was 546 patients and there were positive findings requiring biopsy in forty patients or 7 per cent (Table 6).

Routine proctoscopic examinations of patients over forty having no rectal symptoms totaled 448 with unsuspected positive findings requiring biopsy in 25 patients, almost 6 per cent. Of those 25, unsuspected benign polyps were found to be present in 23. We consider these lesions to be premalignant. However, in addition there were two patients with unsuspected carcinomas.

There were 98 diagnostic proctoscopies on patients sent in with some known rectal condition. In this group there were 15 patients with positive findings that required biopsy. Twelve of these were unsuspected benign polyps, and three were unsuspected carcinomas. These were all unsuspected positive findings in addition to the known hemorrhoids, fistulas, etc. No suspected carcinomas or polyps are included.

We compared these results with the usual routine examinations made on 100 consecutive patients admitted to the surgical service (Table 7).

TABLE 7
Unsuspected Pathology Discovered by Usual Routine Examinations in 100 Patients

1. Complete blood count	0
2. Urinalysis	1 (Same as 5)
3. Serology	0
4. Blood urea nitrogen	0
5. Fasting blood sugar	1 (Same as 2)
6. Temperature, pulse, respiration and blood pressure	3
7. Percussion and auscultation of the Chest	0
8. Chest x-ray	1
9. Proctoscopy	5

In this group only five had unsuspected conditions picked up by the usual routines, while the same number were picked up by proctoscopy as by the total of all the other routines. We believe that routine proctoscopy for patients over forty is worthwhile. I should like to add that 14 of our last 39 resections for carcinoma of the colon and rectum were picked up by routine proctoscopy. It is a particularly valuable procedure for a senior resident in surgery to establish, especially if a junior resident is assigned all the proctoscopics. It will increase the number of carcinomas found to be operated upon.

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TABLE 8
Operations for Mid-rectal Carcinoma

	Miles Operation		Sphincter Preserving Operation	
	Cases	5-yr. Survival	Cases	5-yr. Survival
Best and Rasmussen[5]	112	54.5%	93	55.5%
Waugh and Turner	182	51.1%	131	52.7%

At present there is great difference of opinion as to the proper treatment of carcinomas of the rectum situated more than 5 cms. but less than 20 cms. above the anus. There is general agreement that all situated more than 20 cms. above the anus should be treated by anterior resection, and all situated 5 cms. or less above the anus should be treated by a Miles abdomino-perineal resection with a permanent colostomy. The dispute about those situated in between concerns whether they should be treated by some form of a sphincter preserving operation.

Some comparative figures for the two methods, each series having been operated upon by the same group of surgeons, are shown in Table 8.

The five-year survival is about the same in both groups. There are other series that support these findings. No one argues that a sphincter preserving operation is a better cancer operation than a Miles procedure, but if both give the same results it is as far more convenient for the patient to have an intact sphincter.

I have had a limited experience with what I call the Best Operation popularized by Doctor Russell Best in Omaha. It consists of mobilizing the colon and rectum through the abdomen just as for a Miles resection. Then, after turning the patient over, going through the perineum, pulling down the mobilized segment, and resecting it above and below the tumor, the rectal stump is anastomosed to the proximal end of the colon that is remaining. Actually the dissection is just exactly the same as for a Miles with the exception that the sphincter is left intact. I have operated on nine such patients. One patient died three years later with metastases, the remaining eight are still living and seven of these are apparently well three to six years after the operation. One, a female, had a local recurrence two years later at the suture line, and this was treated by a secondary Miles procedure. She is still living, but has metastases. I am very satisfied with the procedure and continue to perform it on those carefully selected patients.

Recurrence of a rectal carcinoma after a Miles operation is considered to be hopeless as far as further treatment is concerned. That is usually true but there are exceptions which encourage one to keep on trying to relieve these patients. Two women had local recurrence in the area from which their rectum had been removed by a Miles resection. Both were subsequently treated by Brack's radium plaque with gratifying results. One is still living and apparently well nine years after radium treatment. I am sorry to say that this month, seven years later, the first patient has evidence of local recurrence and is now being treated by cobalt radiation.

Peritoneoscopy

Peritoneoscopy is a valuable procedure which is not used as much as it deserves to be. It is done under local anesthesia and disturbs the patient very little. A pneumoperitoneum is created first, followed by insertion of the scope, re-inflation of the abdomen with air so as to provide more room for maneuvering the instrument, and then observation of the liver, omentum, peritoneal surfaces and pelvic organs. It is particularly valuable for determining the causes of ascites and of hepatomegaly.

The cases should be carefully selected and there are three contraindications. These are adhesions from previous operations, abdominal distention, or the presence of acute inflammatory disease within the abdomen.

Table 9 shows the percentage of successful examinations and the complications in our first 120 cases. We have now done over 700.

TABLE 9

Satisfactory Peritoneoscopies		115
Correct Diagnosis		103
Cirrhosis of Liver	25	
Combined Cirrhosis and Tuberculous Peritonitis	1	
Normal Liver and Peritoneum without metastases	19	
Metastases, source invisible	18	
Carcinoma of Ovary, inoperable	7	
Carcinoma of Ovary, operable	2	
Hepatitis	8	
Tuberculous Peritonitis	5	
Ectopic Pregnancy, Present	2	
Absent (1 positive Friedman's test)	2	
Myomatous Uterus, post-menopause	1	
pre-menopause	1	
Ovarian Cyst	2	
Primary Hepatoma	2	
Peptic Ulcer	2	
Carcinoma of Gall Bladder	1	
Obstructive Jaundice due to Stones	1	
Retroperitoneal Tumor	1	
Chronic Passive Congestion of Liver	2	
Hodgkins of Liver	1	
Incorrect Diagnoses		12

Ninety per cent of the examinations were satisfactory; the incidence of complications was 5 per cent and the mortality rate was 0.8 per cent (see Table 10).

TABLE 10

Total Patients Peritoneoscoped		120
Unsatisfactory Peritoneoscopies (Adhesions)		5
Satisfactory Peritoneoscopies	115	
With biopsy	49	
Without biopsy	66	
Complications	6	
Perforated Bowel	1	
Perforated Gall Bladder	1	
Hemorrhage from Abdominal Wall (Fatal)	1	
Postoperative Emphysema	1	
Exacerbation of Symptoms (Fever)	2	
Deaths	1	

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Editorials

SCIENCE FAIR, 1961

THE SIXTEENTH ANNUAL Providence Journal-Bulletin Science Fair opened its doors at Marvel Gymnasium to the public the day after Easter. Once again the people of the state flocked to see, admire, and learn from the scientific efforts of our junior and senior high school students. The exhibits ranged widely over fields of current interest in electronics and physics, mechanics, geology, meteorology, botany, and biology. The students' ingenuity, showmanship, insight, and occasional scientific sophistication were impressive. The Rhode Island Medical Society contributed its support to the stimulating event by making six awards to students demonstrating medical and public health exhibits. These medical award winners were further honored at the Annual Meeting of the Society, when they were presented government bonds in recognition to their achievements.



Rhode Island Medical Society Science Fair winners at the 150th annual meeting of the Society. (l-r) – Peter Arnold, Arlene Antonian, Mary Flannagan, Carol Ann DeAngelis, Charlene Miga, and William Darby.

... PROVIDENCE JOURNAL-BULLETIN Photo

The Society clearly has an obligation to foster scientific interest and education among our young people, particularly in medically related fields, at a time when applications to medical schools seem to be declining in both quantity and quality. We must continue to make the science and practice of medicine an attractive, exciting prospect for students. While there have been objections raised to science projects as frivolous distractions to the basic high school curriculum where excellence is most to be desired, still the creative development of good exhibits seems to encourage the excitement and motivation for the long, laborious pull necessary to basic scientific education. On balance the Science Fair seems to provide an excellent opportunity for encouragement of prospective scientists and, we hope, prospective doctors. We are indebted to Brown University and to the Providence Journal Company for sponsorship of a worthwhile and desirable activity of value to the community and the medical profession.

NEW ENGLAND HEALTH

NEW ENGLAND has always seemed a distinct cultural as well as geographical entity. The rock-bound coast, hard-scrabble farms, elm-shaded streets, and town-meeting governments have molded the people and formed a traditional atmosphere of independence and individuality not found elsewhere. We like to think that New England is distinctive in temper, flavor, and character; but in twentieth century America the old flavor seems a remembrance of things past, long lost to modern organization and communications and to the scientific revolution. Recent government health statistics, however, provide a surprising rebuttal to the concept that New England is just another small slice of the American pie.

From July, 1957 through June, 1959 the U.S. Public Health Service conducted a sampling of American households, asking questions about chronic disease, accidents, and medical attention for the U.S. National Health Survey. These data are published as part of PUBLIC HEALTH SERVICE PUBLICATION No. 584 (Series C, No. 6). In the tables

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of figures New England with surprising regularity occupies an extreme position among the eight regions into which the nation is divided for this survey. Consider eleven chronic diseases investigated: New England is in the extreme position in seven of them with the highest rate of any region in the country for heart conditions, peptic ulcer, hernia, and impaired hearing. However, it has the lowest incidence of arthritis and rheumatism, chronic bronchitis, and chronic sinusitis. High blood pressure, diabetes, asthma, and visual impairment show intermediate rates. Generally some form of chronic disease is reported by approximately 40 per cent of the population of the United States with about 10 per cent showing some degree of activity limitation on that account. This same incidence is found in New England which, however, has the oldest population of any section of the country. Ten per cent of New England people are sixty-five or over. But New Englanders don't go to bed for long when they are sick. The rate for bed-disability is 5.3 days per person per year, the lowest rate in the nation. And 5.5 days lost from work, per person per year, is also the lowest rate in the nation. Americans on the average consult a physician five times a year and a dentist 1.5 times a year, but in New England physician consultations are comparatively low at 4.3 visits per year, while an incidence of 1.8 dental visits is about average. New England is the last bastion of the medical home visit. Seventeen per cent of all medical visits here are house calls compared with 14 per cent in New York, New Jersey, and Pennsylvania, and less than 10 per cent in all other regions.

As cynics have observed before: "there are lies, damned lies, and statistics." In defense of a statistical presentation it can be said that at times no other method illuminates comparisons so clearly. The health statistics of the U.S. National Health Survey indicate that the New England population is older, has a unique pattern of chronic disease, goes to bed sick for a shorter time interval, loses fewer work days from sickness, and consults physicians less often than other American regional groups. But statistics don't explain why. We prefer to believe that New Englanders are still tough, independent, and individualistic. We hope that the high rate of hearing loss reported doesn't mean they didn't hear the questions asked.

BABIES AND BREADWINNERS

WE ARE LIVING in an age of slogans and "gimmicks" and it is no surprise to learn that the United States Public Health Service has succumbed to the seductive siren song of the hucksters. A recent pamphlet titled, *Babies and Breadwinners* issued by the USPHS has outlined the 1961 campaign, designed to stimulate interest in the immediate immunization of all individuals against poliomyelitis.

It is now recognized that the well-publicized oral vaccines (either Cox or Sabin) will not be available in the Rhode Island area before the polio season is upon us; consequently we must content ourselves with the Salk vaccine which has, we feel, broken the back of the polio scourge.

Again this year the physicians of Rhode Island have been asked to help and indeed it is impossible for any successful attack to be launched without the co-operation of the medical profession. The House of Delegates of the Rhode Island Medical Society has endorsed the principle that necessary clinics be approved by the district component medical society in the area in which such clinics are to be held. The Rhode Island Department of Health has offered free vaccine to all physicians and properly endorsed clinics, and the department has set up a Polio Advisory Committee which advises with Doctor Joseph E. Cannon, the director.

Doctor Frank Fratantuono, president of the Providence Medical Association, handled the situation rather well, we think. He asked for, and readily secured, volunteers to help staff clinics in the Providence area for two separate weeks. He stated: "Once this program is completed, it is the opinion of your Association that all Providence residents then should seek any further immunizations at the offices of their individual physicians." This principle is basically sound and is applicable on a statewide basis.



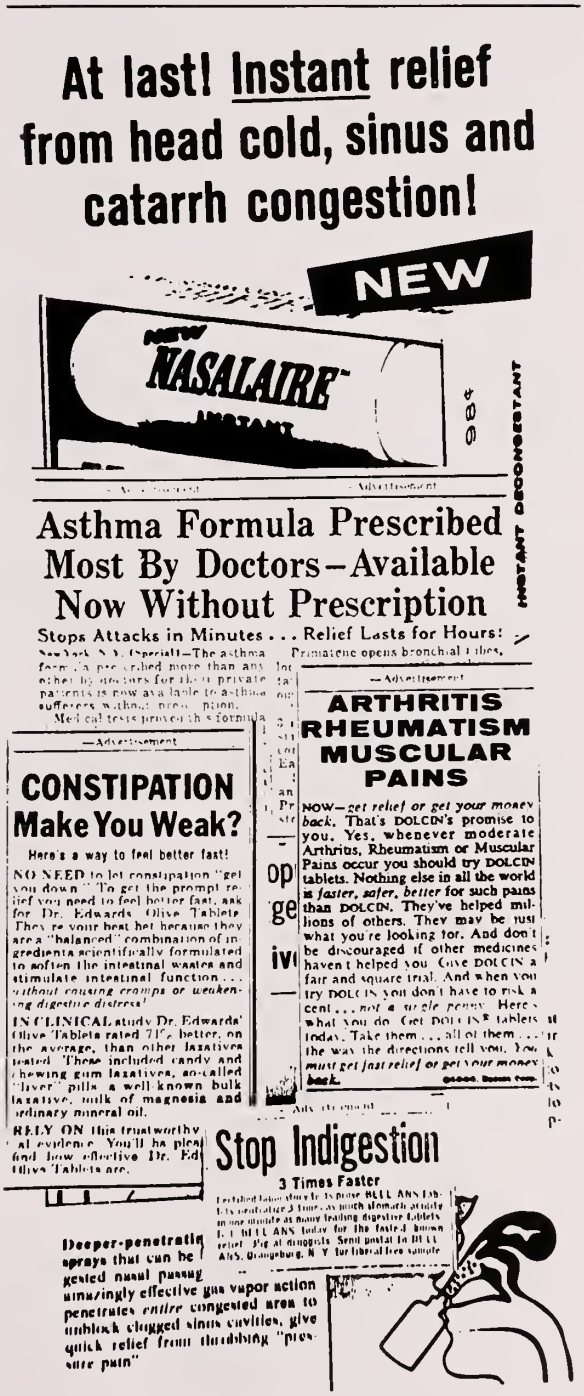
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ARE THEY FIGHTING THE WRONG WAR?

In a recent issue of the New York Times (April 16, 1961) it was reported that "a vast array of complex new regulations governing the drug industry have been handed down by the government and drug officials complain that conforming to these directives is proving to be a costly and difficult business." It was also reported that the problems of the ethical drug industry were further compounded by the introduction of sweeping new legislation by Senator Estes Kefauver of Tennessee and Congressman Emanuel Celler of New York aimed at "curbing alleged abuses in the drug industry." Senator Kefauver's bill would bring about important changes in the manufacture and sale of pharmaceuticals in the United States. It provides that new drugs shall be tested by the government for their effectiveness in addition to their safety. They are presently tested only for safety. Drug manufacturers would be licensed and their plants more thoroughly inspected. Holders of drug patents would be required to license them to other manufacturers after three years (fourteen at present). In addition, the government would be ordered to devise an official list of names of important drugs, thus encouraging doctors to use *generic*, rather than trade names. And finally President Kennedy indicated he might through executive order act to combat high drug prices "and other abuses." One drug company executive was quoted as saying, "We've had a sheltered life for years, but we're really in for a bad time now."

Recently, moreover, the Federal Food and Drug Administration has imposed drastic new regulations requiring full disclosure not only of a drug's indications, but also of its demonstrated and potential side effects. But these latter regulations appear mild in comparison to the proposed new legislation. Although many of these measures are undoubtedly desirable, even overdue in some instances, it would appear to us that the net effect will actually be further increases in the cost of legitimate drugs.

In all this sound and fury, however, we detect a faint odor of politics, even of hypocrisy. Nowhere in all the smokescreen of solicitude for the welfare of the public is there a word of concern about the manifest abuses of that disgraceful multi-million-dollar scourge upon our civilization, the offensive and malodorous patent medicine industry. No newspaper, no magazine, no commentator, no columnist, nor any politician has demonstrated the backbone to speak out against this vicious parasite upon the innocent public or to recommend its drastic elimination or regulation. Nor does anyone holding public office manifest the least interest in the continuous extraction of hundreds of millions of dollars annually by the sale of useless and even harmful nostrums, promoted shamelessly and offensively through the press and television. In view of the conspiracy of silence in this vital matter we can only assume total lack of courage or outright venality.



REGARDING HYPNOSIS

A Statement of Position by the American Psychiatric Association

February 15, 1961

Many inquiries requesting an official opinion of the American Psychiatric Association on hypnotic therapy have been received from local psychiatric and other medical societies and from individual members of the Association and others. These inquiries, in general, ask the following questions: Is hypnosis an acceptable psychiatric procedure? If so, who should teach it? To whom should it be taught? What should be the depth and extent of such teaching? Where can adequate training be secured?

The following statement of position regarding these matters has been prepared by the Committee on Therapy of the American Psychiatric Association and is published with the approval of the Council of the Association for the information and guidance of all concerned.

Statement

Hypnosis is a specialized psychiatric procedure and as such is an aspect of doctor-patient relationship. Hypnosis provides an adjunct to research, to diagnosis and to treatment in psychiatric practice. It is also of some value in other areas of medical practice and research.

Unfortunately, so little is known of the nature of the hypnotic state that definitions usually reduce themselves to mere descriptions of the various manifested phenomena. Few reports of controlled experiments into the nature of hypnosis have been published.

Hypnosis is appropriately and properly used in the course of therapy only when its employment serves therapeutic goals without posing undue risks to the patient. With selected patients, it can be used for sedative, analgesic and anesthetic purposes; for the relief of apprehension and anxiety; and for symptom suppression. It can also be used, but on a still more highly selective basis, as an adjunct in the treatment of patients with neurotic or psychotic illness.

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Hypnosis or hypnotic treatment, as in any other psychiatric procedure, calls for all examinations necessary to a proper diagnosis and to the formulation of the immediate therapeutic needs of the patient. The technique of induction of the trance state is by far the least important of the many facets of the hypnotic procedure and under no circumstance should it be taught independently.

Whoever makes use of hypnotic techniques, therefore, should have sufficient knowledge of psychiatry, and particularly psychodynamics, to avoid its use in clinical situations where it is contraindicated or even dangerous. Although similar dangers attend the improper or inept use of all other aspects of the doctor-patient relationship, the nature of hypnosis renders its inappropriate use particularly hazardous. For hypnosis to be used safely, even for the relief of pain or for sedation, more than a superficial knowledge of the dynamics of human motivation is essential.

Since hypnosis has definite application in the various fields of medicine, physicians have recently shown increasing interest in hypnosis and have turned to psychiatrists for training in hypnosis.

To be adequate for medical purposes, all courses in hypnosis should be given in conjunction with recognized medical teaching institutions or teaching hospitals, under the auspices of the department of psychiatry and in collaboration with those other departments which are similarly interested. Although lectures, demonstrations, seminars, conferences and discussions are helpful, the basic learning experience must derive from closely supervised clinical contact with patients. Since such psychiatrically centered courses are virtually non-existent, many physicians have enrolled in the inadequate brief courses available, which are taught often by individuals without medical or psychiatric training. These courses have concentrated on hypnotic-trance techniques and have neglected or covered psychodynamics and psychopathology in a superficial or stereotyped fashion.

Proper safeguards for the use of hypnosis are vitally important to the patient, to all physicians, and to psychiatry as a specialty. In the interest of encouraging the safe use of hypnosis, the following recommendations are approved.

Recommendations

1. Isolated courses limited to the teaching of trance induction techniques are strongly disapproved.
2. The teaching of hypnosis should take place in medical schools and other psychiatric training centers that have an interest in the teaching of hypnosis. When taught in such a climate, where students can acquire adequate knowledge of psychiatric principles, hypnosis may become a useful adjunct to therapy.

3. The teaching of hypnosis should be of sufficient duration and depth for students to acquire adequate understanding of its appropriate place in relation to other psychiatric treatment modalities; of its indications and contraindications; of its values and its dangers. Decisions regarding the depth and extent of the teaching of hypnosis should remain flexible, and should be made by the psychiatric departments teaching such courses.
4. Training in all aspects of hypnosis should be made available to physicians and dentists requesting it.
5. An expansion of facilities for the teaching of hypnosis is needed particularly at the postgraduate level. The establishment of postgraduate courses in medical schools and other teaching centers under the direction of the department of psychiatry is recommended.
6. Physicians practicing hypnosis should do so only in their particular field of medical competence.
7. The need for continued study of hypnosis and for adequate research is emphasized, with particular reference to delineating its place in the total treatment program.

GASTROINTESTINAL SURGERY

concluded from page 352

When you consider that a large percentage of these patients were peritoneoscoped because they were considered to be too sick to withstand an exploratory operation, the record is good. Furthermore, we have not had any other deaths in the much larger series up to the present.

The procedure has provided the diagnosis in a variety of different conditions as shown in Table 9. We believe it to be a valuable diagnostic aid in highly selected cases.

This concludes my evaluation of selected gastrointestinal conditions with which we have had personal experience, and about which we have developed personal opinions. I believe that you will agree that many problems in this field still await a solution.

BIBLIOGRAPHY

[1]Shackelford, R. T.; Wood, S. Jr.; and Boitnott, J. K.: Primary Sarcomas of the Stomach. Am. J. Surg. 101:292, March 1961

[2]McDermott, W. V.; Palazzi, H.; Nardi, G. L.; and Mondet, A.: Elective Portal Systemic Shunt: An Analysis of 237 Cases. New England J. Med. 264:419, March 2, 1961

[3]Shackelford, R. T., and Marcus, W. Y.: Jejunal Diverticula — A Cause of Gastro-Intestinal Hemorrhage: A Report of Three Cases and Review of the Literature. Ann. Surg. 151:930, June 1960

[4]Shackelford, R. T., and Linn, B. S.: An Evaluation of Routine Proctoscopic Examination of Asymptomatic Patients Over 40 Years Old. Memphis and Mid-South Med. J. 35:271, July 1960

[5]Best, R. R., and Rasmussen, J. A.: Sphincter-preserving Operations for Cancer of Rectum; Special Reference to Incidence and Survival Rates. A.M.A. Arch. Surg. 72:948, 1956

[6]Waugh, J. M., and Turner, J. C. Jr.: A Study of 298 Patients with Carcinoma of the Mid-rectum treated by Abdomino-perineal resection with Sphincter Preservation. Surg., Gyn. and Obst. 107:777, 1958

BOOK REVIEW

STROKE. A Study of Recovery by Douglas Ritchie. Doubleday & Co., Inc., Garden City, N.Y. 1961. $3.50

How does a successful man, a man with a promising future, react when suddenly he suffers a stroke, leaving him speechless and paralyzed? Douglas Ritchie, a famous commentator for the BBC in England, now faces years of indecision, pain, and perhaps the most destructive of all, depression. So many things that had been routinely done suddenly became arduous tasks. Yes, he had "the abilities of a child and the sensibilities of a man," as the book so very well phrases it. When told by a physician that he must do more than exercise his muscles, he turned to writing a diary to regain and develop his powers of concentration; the result after three years is STROKE. Yes, Mr. Ritchie has indeed written an inspiring book about a worthy and courageous subject — himself.

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ANNUAL BUSINESS MEETING
of the
RHODE ISLAND MEDICAL SOCIETY
May 3, 1961

THE INSTALLATION of officers and elected committees to serve the Society for the Sesquicentennial Year ending in May, 1962, the adoption of an amendment to the by-laws to change the Committee on Public Relations and Information to a five-member committee, and the election of Miss Grace E. Dickerman, *librarian emerita* as an honorary member of the Society, featured the general business meeting held during the 150th annual session, on May 3, 1961.

Officers Elected

Doctor Samuel Adelson, Newport surgeon, was installed as the 102d president of the Rhode Island Medical Society, the nation's ninth oldest state medical association. He succeeded Doctor Earl J. Mara of Pawtucket, and he becomes the first Newport physician to be elected president of the state medical society in a thirty-four-year span. Doctor Norman H. McLeod of Newport was elected president in 1927, and in 1943 Doctor Michael H. Sullivan, elected vice president, succeeded to the presidency upon the death of Doctor Murray S. Danforth.

Others elected by the Society were: Doctor Frank I. Matteo, Providence obstetrician, vice president; Doctor Arthur E. Hardy, Warwick surgeon and formerly secretary of the Society, president-elect to succeed Doctor Adelson next year; Doctor Michael DiMaio, Providence internist who succeeds Doctor Hardy as secretary; and Doctor J. Murray Beardsley, Providence surgeon, who was re-elected treasurer.

One-time chairman of the Newport Representative Council, Doctor Adelson brings to the leadership of the state medical society long experience in medical and civic organization work. A graduate of Rogers High School, Tufts College and its medical school, Doctor Adelson established his medical practice in the city-by-the-sea in 1923. He is senior surgeon at Newport Hospital, and in addition to the service as president of the Newport County Medical Society he has served two terms as vice president of the state medical society, and has been active for many years on major committees, and as a member of the Council and the House of Delegates.

His civic record, in addition to his terms of service with the Representative Council, include assignments as secretary of the Newport Board of Health, medical examiner in Newport County, member of the City Charter Commission, and chairman of the Newport High School Commission. His club affiliations include Masonic Orders, the Lions Club, and B'nai B'rith of which he is a past president.

Warwick Native President-Elect

Doctor Arthur E. Hardy, of Warwick, named president-elect of the Society, is a native of Warwick, a graduate of Warwick High, Brown University, and Harvard Medical School. After internships at Chapin and Rhode Island hospitals, he served as resident at the state institutions, and then established his private practice in the Edgewood section of Warwick. Successively secretary, vice president and then president of the Kent County Medical Society, Doctor Hardy has also been active in state medical affairs with major committees, as a member of the Council and House of Delegates, and for the past two years as secretary of the state medical organization. In addition he has been the Society's alternate delegate to the House of Delegates of the American Medical Association for the past eight years.

Doctor F. I. Matteo Named Vice President

Doctor Frank I. Matteo, Providence obstetrician and gynecologist, was elected to succeed Doctor Frank W. Dimmitt as vice president. A native of Providence, a graduate of Classical High, Tufts and its medical school, Doctor Matteo is a past president of the Malpighi Medical Club, and he is currently treasurer of the Providence Medical Association.

Doctor Michael DiMaio, of Providence, named to succeed Doctor Hardy as secretary of the Society, has been a member of the House of Delegates for many years, and he served as secretary of the Providence Medical Association from 1951 until 1959. He is currently a member of the state board of examiners in medicine. He is a native of Providence and a graduate of the University of Rhode Island and of Johns Hopkins Medical School.

Standing Committee Chairmen

Seven major committees, designated as standing committees of the Society whose personnel is elected by the House of Delegates, were elected with the following as chairmen: Industrial Health, Doctor Thomas J. Dolan, of Providence; Library, Doctor Francesco Ronchese, of Providence; Medical Economics, Doctor Stanley D. Simon, of Providence; Publications, Doctor Alex M. Burgess, of Providence; Public Laws, Doctor F. B. Agnelli, of Westerly; Public Policy and Relations, Doctor Samuel Adelson, of Newport; Scientific Work and Annual Meeting, Doctor Jesse P. Eddy III, of Providence.

By-Law Change Adopted

A suggested by-law change proposed by the House of Delegates of the Society was adopted by the membership at the general meeting without dissent. The change was proposed to permit prompt action by the officers of the Society as the official spokesmen in matters involving the profession and the public. Under the new arrangement the president, the president-elect, and the secretary become permanent members of the committee, and each year the House will elect two additional members to serve with these officers. The complete amendment as adopted is as follows:

"*SECTION 11.* PUBLIC POLICY AND RELATIONS. The Committee on Public Policy and Relations shall consist of five (5) members, of whom three shall be the president, the president-elect, and the secretary of the Rhode Island Medical Society, and two members elected by the House of Delegates. The Committee shall concern itself with all matters of public policy, public relations, and information relative to medicine and public health."

Miss Dickerman Elected Member

Miss Grace E. Dickerman, *librarian emerita* of the Society, was elected to honorary membership upon recommendation of the Council, and the election won unanimous approval by the members in attendance at the general meeting on May 3.

A native of South Norwalk, Connecticut, Miss Dickerman entered the Society's employ in 1903 as assistant to Doctor George D. Hersey, then librarian, and she had charge of the medical volumes of the Society that were stored at the Providence Public Library. When the Society acquired its own building on Francis Street, Miss Dickerman became acting librarian, and later librarian upon the death of Doctor Hersey. She held the post until her retirement to the status of *librarian emerita* in 1945.

In 1953, the Rhode Island Medical Society conferred a special citation to Miss Dickerman in recognition of her half century of outstanding service to the medical profession. Her election to honorary membership was announced at the annual dinner May 3 by Doctor Earl J. Mara, president. A framed membership certificate was accepted for the Society's newest member by Mrs. David DeJong, current librarian, as Miss Dickerman was unable to be in attendance at the session.

In addition to the membership award the Society also presented Miss Dickerman with a television.

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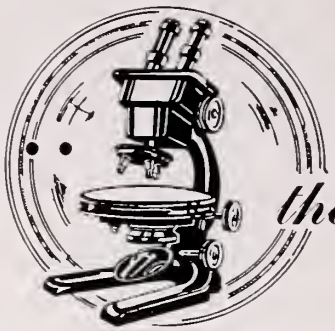
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151st ANNUAL MEETING

THROUGH . . . the Microscope



Blue Shield Plans Business Meeting Actions Far Reaching

The 1961 annual business meeting of the Blue Shield Plans held in Chicago, April 16-18, was one of the most active and progressive sessions ever held, according to NEWSLETTER, official publication of the Association, and it was marked by a series of developments which will undoubtedly have a tremendous effect upon the future of Blue Shield.

Primary among these developments was the adoption of a proposal which, when implemented, will enable Blue Shield Plans to offer an entirely new uniform program on a national basis. This new Blue Shield program is one of the most significant achievements in the history of Blue Shield and will equip the organization to compete with full effectiveness for the first time in the enrollment of companies whose operations and employees are located in widely separated areas across the nation.

The most important aspect of the new program is the method developed to establish the payments for covered services to be provided. This method was arrived at by means of an exhaustive analysis of all existing Blue Shield benefit payments to determine a means of deriving benefit schedules that would be applicable on a nationwide basis. The study ultimately produced a method of devising benefit schedules adaptable to local administration and prevailing local costs in any number of Blue Shield Plans anywhere in the country.

The new nationwide program, when made available, will supplement existing Blue Shield offerings for local groups and will in no way conflict with local Plan operations. On the contrary, the program will simply extend the capability of individual Plans to serve national accounts on a more competitive and realistic basis than is presently possible under the more or less inflexible system of attempting to fit varying local programs to a situation in which uniformity is essential.

The new Blue Shield program is a progressive move forward, NEWSLETTER maintains, which will enable Blue Shield to meet in a dramatic fashion a growing demand among national employers for better forms of health benefits coverage.

Social Security Facts and Figures

The Social Security Administration issued a news release on March 20 which shows that the Old Age and Survivors Insurance Trust Fund continues to squeak at the seams. . . . The release stated that in 1959, the OASI program operated at a deficit of $1.7 billion, which reduced the OASI Trust Fund from $21.8 billion to $20.1 billion. . . . It was then pointed out that in 1960, the program operated at a surplus of $184 million, and that in 1961 a surplus of $18 million is expected. . . . The surplus in 1960 occurred because the social security tax was upped to 6% (3% employee, 3% employer) last year. . . . What the release did not point out although figures accompanying the release did, was that the fund would again have a deficit year in 1962 to the tune of $407 million. . . . The 1962 deficit would bring the trust fund below the $20 billion mark — this from an all-time high in 1956 of $22.5 billion. . . . And these projections are made on the premise that Congress will not increase social security benefits.

It is interesting to note that from 1958 to 1960, the Trust Fund declined at a rate of $800 million a year. . . . Previously, Robert J. Myers, chief actuary for the Social Security Administration, had estimated a lowest average decline from 1958-65 of $300 million a year. . . . Thus, while 1959-60 were fair employment years, the fund declined faster than Myers' lowest estimate. . . . Now, if the Social Security Administration is again estimating a deficit in 1962, the figures are falling far below Myers' most pessimistic forecast of 1958. . . . The Social Security Administration maintains that the Trust Fund will increase beginning in 1963 when another boost in the tax is scheduled.

Unions Campaign to Organize Federal Employees

Harry J. Lambeth, in his column on the *Washington Labor Whirl* for the U.S. Chamber of Commerce reports that if the old saying, "Where

continued on page 362



Recognizing that the exchange of ideas is fundamental to medical progress, Lederle continues its Symposium program with the 10th year of scheduled meetings. Through these Symposia, sponsored by medical organizations with our cooperation, over 50,000 physicians have had the opportunity to hear and question authorities on important advances in clinical medicine and surgery. You have a standing invitation to attend any of these Symposia with your wife, for whom a special program is planned.

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Monday, July 24, 1961
The Plains Hotel

McALESTER, OKLAHOMA
Saturday, July 29, 1961
The Aldridge Hotel

SEATTLE, WASHINGTON
Saturday, August 5, 1961
The Olympic Hotel

KANSAS CITY, KANSAS
Friday, September 15, 1961
Battenfeld Memorial Auditorium

TOLEDO, OHIO
Thursday, September 28, 1961
The Commodore Perry Hotel

WICHITA, KANSAS
Wednesday, October 4, 1961
The Broadview Hotel

TRAVERSE CITY, MICHIGAN
Friday, October 13, 1961
The Park Place Hotel

PEORIA, ILLINOIS
Thursday, October 26, 1961
The Hotel Pere Marquette

PROVIDENCE, RHODE ISLAND
Wednesday, November 1, 1961
The Colony Motor Hotel

HARRISBURG, PENNSYLVANIA
Thursday, November 9, 1961
The Penn Harris Hotel

JACKSONVILLE, FLORIDA
Sunday, November 12, 1961
The Robert Meyer Hotel

ALLENTOWN, PENNSYLVANIA
Wednesday, November 15, 1961
The Americas Hotel

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THROUGH THE MICROSCOPE

continued from page 360

there's smoke, there's fire," has merit, keep an eye on the union campaign to organize more federal employees and finally force the United States government to bargain with the AFL-CIO.

Union officials know the difficulty of getting Congress to pass legislation requiring the government to recognize employee unions as the exclusive bargaining agent for all federal employees. They have pinned their hopes on persuading President Kennedy to issue an executive order requiring government departments to bargain. Once this is achieved, the unions will demand a check-off contract clause whereby the American taxpayers will be paying the cost of collecting union dues. The WASHINGTON STAR has reported that a preliminary draft of an executive order is now being circulated among officials of the Labor department and the Civil Service Commission.

At the moment no union boss would dare ask the right to strike, but this can be expected later. The old cry of "discrimination" and "why can't we have the rights other unions have" will be pushed at every opportunity. Back in 1937, however, President Roosevelt told the National Federation of Federal Employees that "government employees should realize that the process of collective bargaining . . . can't be transplanted into the public service."

Meantime the government unions are pushing their organization drive. Since February, they claim to have rounded up 2,000 new members in Washington.

Deadly Reckoning

Compilations by the Travelers Insurance Companies show that persons killed last year in highway accidents which were blamed on excessive speed totaled 10,970 as compared with 12,980 in 1959. This report is included in the safety booklet published annually by the Travelers since 1931 and distributed to more than 3.3 million persons.

"Citizens organizations throughout the country should take heart in these figures," said J. Doyle DeWitt, president of the Travelers. "This decrease in deaths-due-to-speed is even more significant when you realize that it came in a year when highway accidents actually killed 400 more people than a year ago."

The Travelers president pointed out that speed has long been blamed as "the number one killer on our highways."

"Even with the improved speed record last year," Mr. DeWitt said, "speed was listed as the primary cause of accidents which accounted to 36.1 per cent of the total deaths. As for injuries, the record was not as good. They increased nearly 100,000 with more than 1,000,000 blamed on speed during the year."

Health Plans Cover Long Hospital Stays

Hospital expense provisions of new group health insurance policies now most commonly provide daily hospital room-and-board benefits of $15 or more, and maximum hospital stays of more than two months, the Health Insurance Institute reported recently.

The Institute said its report was based on an analysis of data supplied by insurance companies which were responsible for 68 per cent of the total group health insurance premiums in the United States in 1959. The data sampling consisted of some 1,400 new group hospital expense policies issued during 1960 protecting more than 170,000 employees and most of their families.

These hospital expense coverages provided more than half the employees (54 per cent) with daily hospital room-and-board benefits of at least $15, said the Institute. About three out of every ten workers had daily room-and-board benefits of $18 or more, and one out of four employees had benefits of $11 to $14 a day, the Institute stated.

It was pointed out by the Institute that hospital rates vary greatly by area, reflecting living costs in local communities and the range of services provided.

This was borne out, said the Institute, by a survey in 1959 which showed that the average charge for a bed in a two-bed semi-private room was $25.40 in Los Angeles, and $14.44 in Dallas. Thus, a policy with a $10 benefit in Dallas could actually cover more of the room-and-board portion of a hospital bill than a policy with a $20 benefit in Los Angeles, the HII declared.

When it came to duration of hospital stay, said the Institute, the group hospital expense coverages issued last year provided maximum stays of 31 days or more to 99 per cent of the employees.

Some 56 per cent of the workers had available maximum stays of 70 days or more, while some 20 per cent had maximums of 120 days or more. Other maximum stays were for 150 days, 180 days and 365 days. Some of the policies did not specify a maximum stay but instead had an over-all limit on the combined amount payable for both room-and-board and miscellaneous hospital services.

New Radio-Electrocardiograph Instrument Developed

An offshoot of the United States' successful Astronaut program is expected to provide a major breakthrough in the diagnosis of cardiac disorders, it was revealed at the tenth Annual Convention of the American College of Cardiology held in New York last month.

Physicians at the meeting saw demonstrations of

a new, simplified radio-electrocardiograph system which, for the first time, makes practical the taking of electrocardiograms in doctors' offices or hospitals while patients are exercising.

The new instrument consists of a pocket-sized transmitter which broadcasts a patient's heartbeats to a receiver, as far as 500 feet away. The receiver relays the information to an oscilloscope, electrocardiogram recording machine or tape recorder for medical interpretation.

The lack of any connective wiring between the patient and the recording instruments permits freedom of movement prohibited with previous EKG equipment.

Retired Federal Employees Enrolled in Health Benefits Plan

The Civil Service Commission has tabulated the preliminary results of the enrollment under the Retired Federal Employees Health Benefits Program.

Under this program, the government contributes toward the cost of an annuitant's health benefits coverage $6 a month for a family enrollment and $3 a month for a self-only enrollment. If an annuitant elects to continue in a qualified private health insurance plan, the government contribution will be added to his annuity check to help him pay the cost of that coverage. If the annuitant elects to enroll in the Uniform Plan, for which the Commission is contracting with the Aetna Life Insurance Company, the contribution will go to help pay for the cost of that coverage, with the annuitant's share of the cost being deducted from his monthly annuity check.

The preliminary results show that 126,000 annuitants elected to enroll in the Uniform Plan. Of these, 68,000 enrolled for self-only and 58,000 took family enrollments. A further breakdown of these elections shows the type of coverage chosen under the Uniform Plan:

Self Only	
Basic Coverage	24,000
Major Medical Coverage	14,000
Basic Plus Major Medical	30,000
Family	
Basic Coverage	30,000
Major Medical Coverage	11,000
Basic Plus Major Medical	17,000

Some 91,000 annuitants elected to have the government contribution added to their annuity checks to help pay for coverage with private plans. Of these, 38,000 claimed the $3 government contribution for self-only enrollment and 53,000 claimed the $6 a month for family enrollment.

Over 36,000 annuitants elected not to participate in the program at this time.

Coverage for those annuitants who elected to participate in the program will begin on July 1. However, under its regulations the Commission will continue to accept enrollments indefinitely from those annuitants who have not yet elected. A late election will not become effective until the first day of the fourth month following the one in which it is received.

Medical Technology Degree Program Established

The first medical technology degree program in New England was established this year at Northeastern University in Boston. The program is the only one in the nation that is not in a medical school, according to Doctor Nathan W. Riser, chairman of the University's biology department, as reported in a report issued by the New England Board of Higher Education.

The curriculum combines two full years of training in medical technology at the New England Deaconess Hospital with academic work necessary for the Bachelor's degree. The program is a cooperative one, with the student alternating periods of classwork with paid hospital experience.

Hospital Charges Average $15 to $20 Per Day Across the Nation

Charges for basic hospital services — room, board, routine nursing care and minor supplies — average from $15 to $20 a day in hospitals across the nation, a new American Hospital Association survey has shown.

Rates vary widely according to type of accommodation, hospital size, and ownership, and geographic area. More than half of all beds (54 per cent) are in accommodations within the range of $12 to $20 per day; an additional 27 per cent from $20 to $28. Fifteen per cent are below $12 and only 4 per cent are $28 or over.

The new survey, *Daily Service Charges in Hospitals, 1960,* deals with figures obtained from 4,692 short-term nonfederal hospitals, 94 per cent of 5,455 such hospitals listed by the AHA. The hospitals have 543,758 beds.

The new survey, an outgrowth of earlier "room rate" surveys conducted by the Association, is more accurate and specific than previous studies. It will provide a new benchmark for comparisons of charges in future years, the report said.

Although figures in the new survey cannot really be compared with figures in the earlier ones, a general increase in average charges was noted. The report said this increase "probably reflects not only rising hospital costs but also a trend toward a more realistic balance between charges for routine daily services and unit charges for special services."

Ninety, or 2 per cent, of the 4,692 hospitals use inclusive rate systems with a single charge covering both routine daily services and special services.

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Three geographic areas — New York City, Cleveland and California — accounted for 54, or 60 per cent, of these inclusive rate hospitals.

Average daily charges for all hospitals, according to accommodation, were as follows: single-bed, $20; two-bed, $17.50; three-bed, $16; four-bed, $15.80; five-bed, $15, and six or more-bed, $15.10.

The total beds in two-bed accommodations accounted for nearly 44 per cent of all beds in the surveyed hospitals, a far greater proportion than in any other category.

The proportion of two-bed accommodations was greatest in the East North Central, West North Central, and Mountain areas. In single beds, the West South Central states led with 38 per cent of their beds in single-bed rooms.

The proportion of beds in accommodations with six or more beds was sharply higher in the New England and Middle Atlantic regions, in hospitals of 500 beds or more, and in hospitals under state, city and county auspices.

Geographically, the highest average charge for all accommodations was found in the Pacific region, with New England a close second; the lowest averages were in the West South Central states.

Among hospitals classified by number of beds, there was a steady and marked increase in average charges with increasing size of hospitals for three categories: single-bed, from $13 in hospitals of less than 25 beds to $24.50 in hospitals with 500 or more beds; two-bed, from $12.40 to $19.20, and four-bed, from $11.90 to $18.70.

Bigger VA General Hospitals Planned

Major changes in hospital design will be incorporated in the Veterans Administration's twelve-year, $900,000,000 program for modernization and replacement of its obsolescent hospitals, the VA chief medical director, Doctor William S. Middleton, stated recently.

Doctor Middleton said the changes will result from progress in care of patients with tuberculosis and psychiatric illness and from the increasing application of automation in medicine.

The trend is away from special hospitals for psychiatric and tuberculous patients and toward the general hospital which can care for these patients as well as general medical and surgical patients.

VA has already converted nine of the agency's TB hospitals to general medical and surgical use, and units for treatment of patients with chronic nontuberculous pulmonary disease have been incorporated into the planning for VA hospitals.

Doctor Middleton said the large psychiatric hospital with its dormitories is a "relic of the past," and even the presently-projected 1,000-bed hospitals for the mentally ill appear unwieldy.

"Psychiatric units are being planned for VA general medical, surgical, and neurological hospitals, and units of medical, surgical, and neurologic beds are being incorporated in VA psychiatric hospitals," he said.



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BOOK REVIEWS

SURGERY IN WORLD WAR II. THE PHYSIOLOGIC EFFECTS OF WOUNDS by The Board for the Study of the Severely Wounded, North African-Mediterranean Theater of Operations. Medical Department, United States Army. Wash., 1952. $3.50

This is a unique book for a number of reasons. Several of the members of the Board are well known to doctors in this area, namely the late Tracy B. Mallory (chairman), Henry K. Beecher, and Fiorindo Simeone. It is one of several volumes that make up the monumental work, SURGERY IN WORLD WAR II, produced by the Historical Section, Army Medical Service. Truly, this collection of medical knowledge is unparalleled among recent works, and the whole profession can feel fortunate that such material is available. Who else but the army could collect such an array of talent and share the fruits so generously? For those unable to read the whole series, it is suggested that this book be read as a companion to GENERAL SURGERY IN WORLD WAR II, VOL. II.

The introduction was written by Edward Churchill. It is an excellent summation of the development of surgical experience through World War II, and of the way that evidence was accumulated to bring about radical changes in concepts born during World War I and later. At the beginning of the war, the National Research Council advised that plasma be used as the primary fluid for the treatment of shock. The North African Campaign was barely over before it was realized that the emphasis should have been on whole blood. Similarly, the ideas about shock that were inherited from World War I were largely altered and much confusion and error eliminated. This came about through the work of the resuscitation teams that were organized to prepare the wounded for surgery. Resuscitation thus became the means of bringing the entire care of the wounded into perspective. . . . "Surgery is not only the goal, but in itself is a part of resuscitation," said Beecher.

The accumulating experience thus created a need for organization. It was known that much of World War I knowledge was lost because it had never been properly recorded. This must not happen again. About January, 1944, John D. Stewart (Lt. Col.) made arrangements with others for a small mobile laboratory to be set up near the 11th Field Hospital in Italy. Its purpose was to study by formal biochemical means certain aspects of shock, hemorrhage, and dehydration. Other important work was being done about the same time by Beecher and Burnett at the 94th Evacuation Hospital. These investigations pointed up the need for a formally organized group with the specific purpose of studying the severely wounded. Thus in September, 1944, a Medical Board to Study the Treatment of the Severely Wounded was formally established. This monograph is the result of this study.

The external violence of wounding agents was well known, but the internal state of the severely wounded man was not. The general effect on the entire physiological state was to be investigated. Only the severely wounded, studied as early as possible and as close to the locale of wounding as feasible, were admitted for study. This was done without interfering with the regular care of the wounded or the tactical situation. All conditions were not perfect for the study, but well-documented facts from the 186 men studied were utilized.

The research involved a general evaluation of the physiological state, with special attention to the liver and general pathology. Over half the book is devoted to the kidney in "shock," including the diagnosis and treatment of lower nephron nephrosis, pigment mobilization by the kidney, and the crush syndrome.

Obviously much of this book is a massive compilation of data which is presented in chart and diagram form. But these charts are very direct and easy to comprehend. The prose is, as it should be, "the ordinary language of doctors," and it is smooth reading. Summaries and conclusions end each chapter.

It is a book well-worth reading for all physicians. It is basic medicine, well organized, from a source that is rarely available. We owe a debt of gratitude to these men, but more so to the United States Army, which made it all possible. The National Research Council at the beginning of the war had actually recommended such a study, but had suggested that it be done by men freed of the duties of army officers. Instead, as Churchill writes: "They

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were not a group that merely worked in the army, they were of the army."

RAYMOND X. MACANDREW, M.D.

OFFICE GASTROENTEROLOGY by Albert F. R. Andresen, M.D. W. B. Saunders Co., Phil., 1958. $14.00

Doctor Andresen presents in his volume a good deal of common sense advice on the gastrointestinal tract which is unusual for a book of this type. All the practical help and assistance he offers comes from his personal experience of over forty years of teaching and clinical practice. He describes the general concepts of gastrointestinal physiology, pathology, and treatment. Then he considers in detail three types of gastrointestinal disease: 1. Those which may affect any part or all of the gastrointestinal tract; 2. Those which affect only an individual part; and 3. Those which originate elsewhere but produce gastrointestinal symptoms or lesions. Under each disease physiologic indications for treatment are discussed and treatment is specifically outlined.

Nutritional needs and the effects of foods on gastrointestinal functions are outlined. The effects of indiscriminate use of drugs are pointed out. The indication and need for X-ray and laboratory studies are discussed with good perspective. Also, the indications for surgery and some of the complications resulting from surgery are presented.

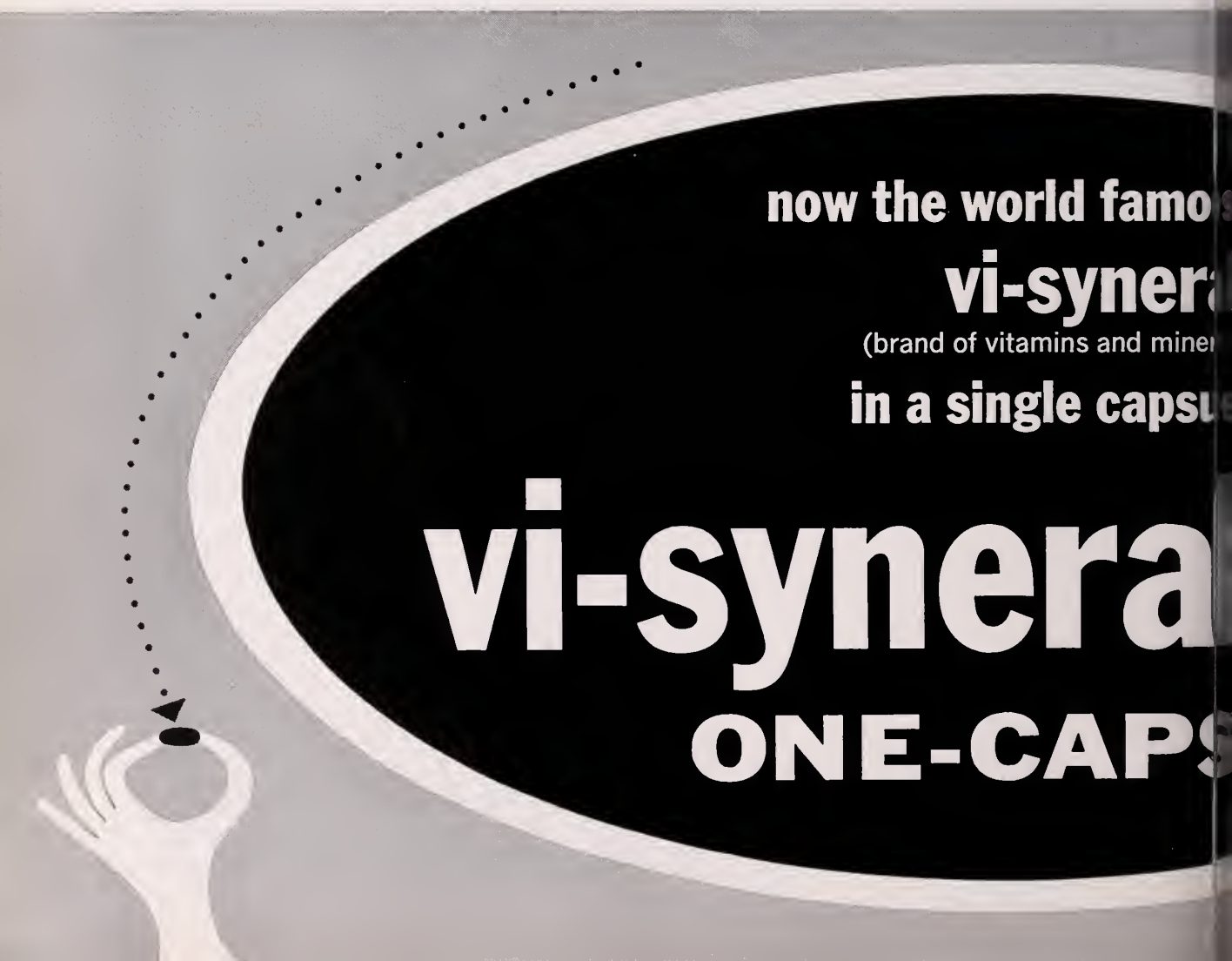
It is felt that Doctor Andresen has compiled much practical and usable information of equal value for the student, general practitioner, and internist. His thoughts are presented clearly and concisely. This volume should find a convenient place on the bookshelf of the busy physician.

ELIHU S. WING, JR., M.D.

THE GENTLE LEGIONS by Richard Carter. Doubleday & Company, Inc., Garden City, N.Y., 1961. $4.50

THE GENTLE LEGIONS is a book which is both good and bad, with the bad outweighing the good. It is an interesting and engaging work for the first two-thirds. After that, because the author is carried away by his dislike of private enterprise, he becomes a poor reporter.

He begins well with a style both witty and charming, as he reports the backgrounds, purposes, and mechanics of the Red Cross, National Tuberculosis Association, American Heart Association, National Foundation for Infantile Paralysis, American Can-



cer Society, and others. Many questions are answered, and it seems to me that these voluntary health organizations are reported in general with fairness and clarity. So much for the first two thirds of THE GENTLE LEGIONS.

During the last third he really winds up and takes off in a bitter attack against the United Fund. Basically, he seems to feel that the Red Cross and other independent and voluntary health agencies which are on a relatively small scale, are permissible. However, according to the author, if a large scale effort is to be made to help many health and welfare agencies it should not be a united voluntary movement by individual Americans. It should be done only by the government — that is his preconceived conclusion.

He does not think much of private enterprise . . . in fact, he seems to dislike it intensely, especially if government is subservient to it. As a result, in reporting on the United Fund movement he writes from his own feelings, without documentation or specific references and proof.

Here is a book that starts out a winner and ends up a loser.

JOHN A. DILLON, M.D.

TENDON TRANSFERS IN ULNAR NERVE INJURIES by Armand D. Versaci. Plast. & Reconstruct. Surg. 26:500, 1960

Ulnar-nerve severance destroys the innervation to the intrinsic muscles of the hand, robbing it of its ability to perform the refined motions so necessary to the artisan and the skilled worker. The typical hand in ulnar palsy exhibits clawing of the ring and little fingers, loss of lateral finger motions, weakness of pinch and flattening of the transverse palmar arch. In high nerve lesions, terminal phalangeal flexion of the ring and little fingers may be affected.

Since the loss of motion varies with the pattern of innervation in any particular case, it is imperative to appraise the injury in terms of specific functional losses. Specific losses not recovered after otherwise successful re-innervation of the intrinsic muscles can be restored by tendon transfers. When definitive nerve repair is either unsuccessful or unduly prolonged, tendon transfers offer an immediate and functionally desirable solution to the problem. The most important intrinsic motions can be restored successfully without jeopardizing the basic attributes of the hand. The specific losses are considered individually, and tendon transfers for their correction suggested.



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ANNUAL NARRATIVE REPORT
of the
WOMAN'S AUXILIARY OF THE RHODE ISLAND MEDICAL SOCIETY
1960 — 1961

Mrs. Richard Rice, President, 1960-61

The Woman's Auxiliary to the Rhode Island Medical Society has in every field of endeavor followed this year's theme advanced by our national president, Mrs. William Mackersie, *Accent Service to Preserve and Enhance the Heritage of American Medicine.* Each state has a situation peculiar unto itself, and, of course, governs its particular activities according to the needs and policies of its medical society. In so doing, we, at the close of another year, although a small state, feel the satisfaction of a big job well done. Statistically, to cover all required activities, we report the following:

A.M.E.F. Each organized county in Rhode Island raised money for this purpose. The state, by means of its annual dinner dance, covered the estimated donation. Individual use of the utility cards, plus the use of A.M.E.F. corsages, have us well over the estimated amount raised. Most important was the enthusiasm and response shown by the counties to the request of the state president for at least *one* "Fun-Fund-Raising Activity" for A.M.E.F. At our annual meeting Kent County received a certificate of merit for the largest amount donated and for 100% contribution. Our state A.M.E.F. chairman arranged to have a display at our annual meeting. Material sent from the national society was used and was quite effective. The total sum to be donated this year is not complete, but to date we have raised $450.00.

Bulletin

Our state Bulletin chairman at the first Board meeting collects money for subscriptions to the *Bulletin.* It is required that all state Board members subscribe. The county officers this year have been advised to do likewise. A new county just organized is striving for 100% subscription. The information derived from this booklet is absolutely beneficial to those in office and it would be well to require all members to subscribe.

On the state and county level we enjoy close relationship and co-operation with the Medical Society. We have three medical advisers and meet with them when necessary for advice. Our Auxiliary donates to the State Medical Society Benevolent Fund. Space is provided for us at the Medical Library for Auxiliary records and files and secretarial work such as announcements, fliers, etc. Our state program chairman has adhered closely to the policy of having both informative and entertaining programs planned for all meetings. Lectures by our own doctors, the use of films from National, plus the use of the skit *Four for Bridge* have been useful. Working closely with Hospitality and Membership chairmen, a very good attendance has been achieved. A summary of the various programs used by the counties was made and sent to the Eastern Regional program chairman, Mrs. George Ross, at her request, that she might have a display for the National Convention in June. We have found that a good program with membership participation (Skits and Fashion Shows, etc.) draws the most response and then with the captive audience, the more serious messages from Medicine can be included.

In response to a request for aid at the Diabetic Fair, sponsored by the Providence Medical Society, the state Auxiliary supplied nineteen volunteers to work at Pawtucket Memorial Hospital on November 16, 1960. Approximately 100 hours' work was given by these already busy doctors' wives. Working with the State Industrial Nurse director, our girls prepared ten thousand dri-paks to be distributed to factories for diabetic detection.

Safety

Early in the year our state president and safety chairman attended a planning session for a state conference on June 2, 1960, on Traffic Safety. Our state chairman, Mrs. Alexander Jaworski, was chosen to be secretary to this group. As an outgrowth of the Regional Traffic Safety Conference held in New York last fall, the Woman's Auxiliary to the Rhode Island Medical Society, working in conjunction with other women's organizations, planned a conference of Women's and Parents' organizations on Traffic Safety which was held at the Sheraton-Biltmore Hotel in Providence on Monday, September 26, 1960. This was in cooperation with the Rhode Island Council on Highway Safety.

The program had been planned to inform the organization members of the scope of the traffic accident problem, the need for traffic safety and what organizations can do about it. A guide for

community action developed by the National Safety Council and the Rhode Island Council on Highway Safety was presented.

The day's schedule began with registration at 9:00 A.M. A message from Governor Del Sesto was read at the start of the general session at 10:00 A.M. After a noon luncheon, there were four workshops at the afternoon session to complete the program.

Representing our Auxiliary was our safety chairman and secretary to this conference, Mrs. Alexander Jaworski, and our president, Mrs. Richard Rice, and her guest, Mrs. Joseph Chatigny, Eastern Regional Safety chairman. We were also represented at the Fifth Annual Governor's Conference on Traffic Safety on December 5, 1960, by our president-elect, Mrs. J. O'Brien. Our Safety chairman has been responsible for the presentation of safety programs to twenty-four organizations including hospital auxiliaries and P.T.A. groups. Aids used were "gem-packets, slides, lurking hazards in the home," posters regarding water safety (skiers and within boats), also posters concerning safety in the home (fire prevention, etc.) have been used. Because our state chairman of Safety is also president of two P.T.A. groups, excellent use of this material has been made — to say nothing of her TV appearance to be mentioned later.

This takes us into the field of voluntary service and philanthropic work in which our members are always actively engaged. A very nice example was voiced by the representative of one of our unorganized counties: "Lest you think we are completely idle down here — Dale Smith is chairman of the Barrington Cancer Crusade and I am residential gifts chairman. I mention this only because I think you should know that it is almost an overwhelming job lining up all the people we need to help us. I have over 200 in my part of it, and the doctors' wives responded just about 100% when I called them. I was really proud!" (Dale incidentally is editor of our state publication NEWSLETTER.) There are members-at-large, as in every other state, busily engaged in all *kinds* of volunteer work. The scope is really too vast to elaborate on.

We are proud of a member, Mrs. Russell R. Hunt, elected Rhode Island Mother of the Year for 1961. Our Auxiliary was proud to be represented at a luncheon in her honor on April 28, 1961.

Publicity — which we have not sought but have used as a means for better public relations, has been done in the usual manner, but with greater emphasis on television. A very special program was carried out this year by our Community Service chairman. Most of our important committees worked with the corresponding committee chairman from the Medical Society to further the cause of good public relations and inform the public of the aims and accomplishments and purpose of our Medical Society. Community service, a joint endeavor, certainly came to be when, through the courtesy of a state TV station, a public service TV series was presented on six half-hour morning spots in November. Judging by the verbal and written response, both to the station and to Auxiliary members, the project was well received by the public, indicating a good job had been done. We felt that TV is an invaluable vehicle for educating the public on health subjects as well as improving the doctor image in the eyes of the public.

1. *Civil Defense* — state Auxiliary CD chairman discussed home and family preparedness, using many booklets obtained through our state OCDM and table-top exhibits of home shelters obtained from our OCDM Region 1. A booklet on SHELTERS AND EQUIPMENT was sent out free in answer to all requests. A physician from the State Department of Health discussed *Emergency Medical Preparedness in Rhode Island*. The two worked together beautifully.

2. *Mental Health* — state Auxiliary Mental Health chairman and her husband, a psychiatrist, discussed facilities in Rhode Island and suggestions for maintaining good mental health, or preventing mental illness.

3. *Safety* — state Auxiliary Safety chairman discussed home, family and water safety, using a GEMS packet from National, and the home accident picture given out at Chicago Conference (Southern Union Gas Co.) Water Safety information from Red Cross. Also Safety slides used in P.T.A. talks, etc. The head of the Rhode Island Hospital Poison Control Center talked on this and used slides.

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Mrs. James P. O'Brien, new president of the Woman's Auxiliary of the Rhode Island Medical Society, accepts the gavel from retiring president, Mrs. Richard Rice.

... PROVIDENCE JOURNAL-BULLETIN Photo

4. *Problems of the Aging*— hostessed by an Auxiliary member who is a former medical social worker. A physician specializing in geriatrics talked of the medical problems, and a staff consultant of the Rhode Island Council of Community Services presented the social and economic aspects. Our Auxiliary member offered the free booklet *Medicine's Blueprint for the New Era of the Aging* to write-ins.

5. *Health Careers* — Auxiliary members (medical technician, social worker, occupational therapist, dietitian, physical therapist) led by the Careers chairman discussed their specialties, showed pictures, and gave brief résumés. The chairman told of the Auxiliary Scholarships and others available.

6. *Community Health* — state Auxiliary chairman talked of TODAY'S HEALTH, showing sample copies, and the value of periodic checkups and keeping health records and getting to know your doctor. She used many booklets pertaining to these subjects from A.M.A. and offered free the individual A.M.A. Health Information card and the A.M.A. YOUR FAMILY HEALTH RECORD booklet. She also used health posters to show the value of starting health education early.

One physician reported on the Medical Society-sponsored Diabetic Fair. Another reported on facts and lessons learned during last summer's polio epidemic. These shows received the full approval of the Rhode Island Medical Society. *Mental Health* and *Civil Defense* were rerun on a Sunday morning (originals were all weekdays) and *Careers* was requested by several high schools and *Community Health* by hospitals for reruns, but unfortunately had been erased. They were all taped shows, but run through without rehearsals to give spontaneity to the shows.

It was generally felt that a definite public service was rendered and it was termed an "outstanding show by the TV station." As a result our Medical Society gained in good public relations. Our Community Service chairman has been authorized this year to represent our Auxiliary at the monthly meetings of the Rhode Island Council of Community Services, Inc.

Mental Health

Besides taking part in our TV series, our State Mental Health chairman arranged for our Board meeting and coffee hour at Butler Health Center, a leading psychiatric hospital in this state. This was followed by a tour conducted by the nursing service and was open to all Auxiliary members and interested friends. Our Auxiliary is represented at Mental Health Conferences, Butler Hospital Auxiliary, Charles V. Chapin Hospital and has contributed volunteer services by individuals as well as donating phonograph records, literature, magazines, etc., as the need arises. An ever-increasing demand for volunteers is being realized and should pose a challenge to our members for increased service in the future.

Civil Defense

Our Civil Defense activity has been kept well stimulated by our state chairman and by the Eastern Regional CD chairman who is a member and past president of our own state Auxiliary. She incidentally has the first *official* fall-out shelter built on the premises of an Auxiliary member in our state. However, many of our homes are ready for such an emergency. Our state chairman has attended meetings in Rhode Island and Massachusetts, received material such as home shelter model, films on home preparedness, posters and photographs, pamphlets on CD. She has distributed two hundred signed warning cards to P.T.A. groups and our Auxiliary. One hundred medicare clips have been distributed to our Auxiliary members. We are represented on the Woman's Advisory Council for Civil Defense here in Rhode Island. In addition to the TV program previously mentioned, our chairman has discussed informally ways of making the community aware of its part in civil defense.

On April 27 and 28, we as Auxiliary were requested to act as observers during the National "Operation Alert 1961." Co-operating with civil defense officials, members of our Auxiliary were stationed at marshaling yards all over the state including the control center. The equipment available and in good condition was that of locally owned fire and CD units and those purchased under the Federal Matching of Funds program.

By reports from Auxiliary members in various parts of the state, a complete picture of a state-wide readiness was gathered.

Legislation

A column called the *Legislative Corner* is written by the Legislative chairman for every issue of the Auxiliary *Bulletin*. This column is read by the entire state membership and keeps them informed on legislation on a state and federal level, particularly on medical legislation or that which affects the society. This information is gathered constantly through communications from the Rhode Island Medical Society, the A.M.A. *News*, the newspapers and literature sent from National. Literature sent to the Legislative chairman is distributed at Board meetings. We are a member of and attend all meetings of the Joint Legislative Council of Rhode Island.

Publications

Our state publication is called the NEWSLETTER. It is a budgeted expense from our treasury and goes to every state Auxiliary member, all state editors, the president and executive secretary of the Rhode Island Medical Society and to the national president, Publications chairman and executive secretary, three times a year.

Membership

Through the combined efforts of our Membership chairman, state organizer, and other board members, a new County Auxiliary was formed. A coffee hour was held for wives of members of the County Medical Society. The state Auxiliary president, Mrs. Rice, and even the Medical Society president, Doctor Mara, attended and discussed with this group the purpose of Auxiliary, which formed the nucleus of interest. Later at the call of the county representative, Mrs. Tartaglino, another meeting of these wives was held and the group decided to organize on January 23, 1961. Out of thirty-five eligible members, there are now thirty paid Auxiliary members. We are proud and pleased to have this new constituent Auxiliary added to our state organization. The state has a total membership of five hundred eighty-five members with three hundred thirty-eight members-at-large.

Health Careers

This committee represents a panel made up of doctors' wives representing the following careers: dietitian, medical technologist, physiotherapist, occupational therapist, medical social worker. Each member of the panel is a qualified member of her profession. An informal panel presentation of these careers is given and very well received by students at the High School level. After each presentation, there were brief conferences with any students interested. Pamphlets were made available to all students for each career. The pamphlets were very popular with the students. This year two $300.00 scholarships in these health fields are to be awarded and by special request from this committee an additional donation will be given to the University of Rhode Island Scholarship Fund.

Also our Nurse Scholarship chairman will award the Lillian M. Harris Scholarship to two young student nurses. Using the rotating plan among the five eligible schools of nursing in Rhode Island we gave one scholarship to Pawtucket Memorial Hospital and one to Roger Williams Hospital School of Nursing. Both schools were very grateful to receive this aid. An additional amount was given to supplement one scholarship because of a particularly deserving case.

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of the

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Sunday . . .

IN THE COUNTRY

October 15, 1961

FAMILY DAY

for the

Members of the

Rhode Island

Medical Society

and the

Woman's Auxiliary

at the

ANDERSON FARM

Coventry

Rhode Island

Check the date!

Details later!

The Doctors' *Benevolent Fund* received $375.00 from the Auxiliary this year. The additional from an accumulated sum which was decided to be distributed to this and all the above-mentioned community services plus A.M.E.F. Most of the funds raised comes from our Ways and Means committee by means of a state dinner dance which once again successfully supplied the estimated necessary amount.

Over and beyond the statistical report of accomplishment is the sense of unity coming from an organized group of women working together for a common cause.

Guided by our state Medical Society locally on political issues, we have not "trod where Saints fear to tread," but have at their request left these subjects for the Medical Society to handle. By accentuating the positive, by informing the public and providing programs suggested by the A.M.A., we have tried to make it known that medical people want "to help those who need help." We have emphasized that the public, desiring medical care under a social plan, are risking the loss of freedom of choice. What good citizen doesn't value his right to vote? And thus it follows, he should value the right of having the service of a physician of his own choosing. In this year of work, we were ever mindful of striving to preserve the heritage of American medicine.

1960-1961 — Represented at the following:

1. Joint Legislative Council of Rhode Island
2. Rhode Island Conference of Social Workers
3. Governors' Conference on Traffic Safety
4. Women's and Parents' Conference on Traffic Safety
5. Rhode Island Council on Highway Safety
6. The Rhode Island Council of Community Services, Inc.
7. The Rhode Island Woman's Advisory Council for Civil Defense
8. Women's Civil Defense Council — Region 1 in Topsfield, Mass.
9. The Connecticut Conference on Homemaker Service

Contributions Made from Funds Raised this Year

1. Nurse scholarship, Pawtucket Memorial Hospital	$ 225.00
2. Nurse scholarship, Roger Williams Hospital	160.00
3. Paramedical Careers Scholarship	300.00
4. Paramedical Careers Scholarship	300.00
5. Paramedical Careers Scholarship	50.00
6. Doctors' Benevolent Fund, Rhode Island Medical Society	375.00
7. A.M.E.F. (National)	450.00
Total	$1,860.00

WOMAN'S AUXILIARY TO THE RHODE ISLAND MEDICAL SOCIETY

OFFICERS AND COMMITTEES, 1961-1962

Officers

President ..... Mrs. James P. O'Brien, 85 Woodland Road, Woonsocket, PO 2-3301
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SCANNING THE MEDICAL LITERATURE

Abstracts of Papers Written by Rhode Islanders

THE IMPACT OF PARENTS ON THE GROWTH OF EXCEPTIONAL CHILDREN. Eric Denhoff. J. Exceptional Child. 26:271, 1960.

This article summarizes the reasons for the feelings of parents regarding their handicapped children. Data are from studies at Meeting Street School with children who are handicapped by cerebral palsy and related disorders. It is felt that parents of handicapped children have the same basic feelings for their children as parents of normal children. Early pregnancy attitudes based on fears or misconceptions of handicap greatly influence a mother's feelings for her child.

Parents who have distorted precepts about childhood behavior have a strong adverse impact on their child's future adjustment. In reverse, parents who are warm and accepting, and will accept professional advice, can favorably influence their child's development when physical and intellectual aspects in early childhood appear dim. Therefore, emphasis must be made in treating the family as well as the child in the habilitation of chronic disabilities of childhood. The parents must realize that, although a handicapped child can never achieve the same excellence in performance as an unhandicapped child, psychological factors can often influence more ultimate adjustment than can the degree of handicap.

ERIC DENHOFF, M.D.

DIHYDROVITAMIN K_1 BIPHOSPHATE IN BISHYDROXYCOUMARIN INDUCED HYPOPROTHROMBINEMIA. Milton Shoshkes and Mario Tami, J. Lab. & Clin. Med. 56:21, 1960.

Dihydrovitamin K_1 biphosphate, a water soluble salt, has been reported to be an effective antagonist to drug induced hypoprothrombinemia, comparable to, if not superior to, oil soluble vitamin K_1. This water soluble salt was administered to hospitalized patients rendered hypoprothrombinemic with bishydroxycoumarin in doses varying from 5 to 50 mg. orally, 10 to 50 mg. intravenously, 50 mg. intramuscularly, and 50 mg. subcutaneously. Prothrombin times observed over 24 hours demonstrated this vitamin to be quite ineffective when comparisons to a control group were made. A definite positive effect greater than the control could be found only after 50 mg. intravenously or subcutaneously was given; all other dose ranges and routes were lacking in prothrombin time response, failing to confirm any therapeutic effectiveness with dose ranges comparable to those recommended for phytonadione by oral and parenteral routes.

MARIO TAMI, M.D.

CAPILLARIES OF NORMAL AND DISEASED BREAST. Herbert Fanger and Barbara Barker, A.M.A. Arch. Path. 69:67, 1960.

The capillary vasculature of breast tissue can be demonstrated by the histochemical reactions for alkaline phosphatase and peroxidase in thick sections of tissue. There is a complex network of capillaries surrounding the ducts and ramifying in the lobules of normal breast. In benign lesions of the breast, the capillaries have a similar distribution, but their arrangement is altered, corresponding to the distortion of the epithelium.

The alkaline phosphatase technique shows a diminished capillary vasculature in the connective tissue surrounding large cysts in fibrocystic disease, in florid adenosis, and in carcinoma. There is a possibility that the paucity of capillaries demonstrated by this procedure may be due to altered metabolism of capillary endothelial cells.

PHOSPHORYLASE AND AMYLO-1, 6-GLUCOSIDASE IN BREAST TISSUE. Herbert Fanger and Barbara Barker. J. Nat. Cancer Inst. 24:691, 1960.

Phosphorylase and amylo-1, 6-glucosidase catalyze the reversible reaction glucose-1-phosphate to glycogen. Breast tissue abounds in both enzymes, in contrast to apocrine sweat glands, which have none. It had previously been suggested that the secretory portion of the breast consisted of modified sweat-gland tissue. This work suggests that these two tissues have a profoundly different metabolic activity.

EMERGENCY RENAL SURGERY IN THE NEWBORN INFANT. Arnold Porter and Ernest K. Landsteiner. New England J. Med. 263:1, 1960.

Approximately fifty per cent of abdominal masses

in the newborn infant are of urinary tract origin. Most of these are in the kidney and may constitute a surgical emergency because of distressing symptoms or the possibility of malignancy.

Physical examination and laboratory studies including intravenous urography through the preoperative intravenous cutdown aid in establishing the diagnosis.

Surgical emergencies of the kidney in the newborn include renal tumor, solitary renal cyst, unilateral multicystic kidney disease, renal infarction, and ureteropelvic obstruction.

Renal Tumor

Malignant renal tumors are rare at birth and must be differentiated from malignant neuroblastomas and retroperitoneal teratomas.

Solitary Renal Cyst

Solitary renal cysts in the newborn are similar to those found in older children and adults and should be locally excised. They are often associated with other urological anomalies.

Unilateral Multicystic Kidney Disease

Unilateral multicystic kidney disease is a separate entity to be differentiated from bilateral polycystic kidneys. The kidney is practically replaced by a cluster of varying size cysts and the ureter is usually absent or atretic. Symptoms are few and a unilateral flank mass is usually picked up on routine examination. Nephrectomy is the only treatment.

Renal Infarction

Renal infarction secondary to renal-vein thrombosis may be unilateral or bilateral and is usually associated with dehydration from other causes. The diagnosis should be suspected when a flank mass, hematuria, pyuria, oliguria fever, leukocytosis, shock, and a hemolytic type of jaundice are found in an ill baby. Nephrectomy is indicated in unilateral disease and supportive therapy and anticoagulants are reserved for bilateral disease.

Ureteropelvic Obstruction

Ureteropelvic obstruction due to intrinsic or extrinsic causes is a common anomaly. Gastrointestinal symptoms and/or respiratory embarrassment secondary to the large mass may mark the situation as an emergency.

The surgical procedure of choice depends upon the etiology of the obstruction, the amount of kidney tissue present, and the status of the opposite kidney. Usually, if large enough to cause symptoms in the neonatal period, nephrectomy will be required.

EDITORIAL: THE PRESENT STATUS OF PERIPHERAL ARTERIAL RECONSTRUCTION FOR ARTERIOSCLEROSIS OBLITERANS. Seebert J. Goldowsky, M.D., Ann. Int. Med. 52:268, 1960.

The emphasis in this review is on occlusive disease as contrasted with aneurysm, and on the peripheral ileo-femoro-popliteal vessels rather than the more central aorto-iliac system. Clinically this represents the essence of the major problem in peripheral arteriosclerosis obliterans.

The relatively large series of cases amenable to surgery accumulated in the vascular centers is not a true indication of the incidence of suitable cases in a general medical or surgical practice, or in a community general hospital accepting run-of-the-mill admissions.

It must be concluded on the basis of present evidence that best results can be expected in bypass shunts of micro-crimped dacron or teflon or in thromboendarterectomy, performed in cases with adequate run-off. Conditions suitable for surgery will be present in some 25 to 60% of cases. Immediate restoration of circulation can be expected in somewhere between 65 and 95% of operated cases, while late failure will occur in 10 to 80% of those having immediate success. The evidence is still equivocal, and the paucity of reports and the slowness with which they are appearing would suggest that success in this area is still of a limited nature.

INJECTION THERAPY OF GRANULOMA ANNULARE. Arthur B. Kern and Bencel L. Schiff. A.M.A. Arch. Dermat. 81:969, 1960

Treatment for this cutaneous disorder of unknown etiology has included a great variety of measures. This multiplicity of therapeutic approaches is evidence of the fact that nothing specific has been available. Accordingly, with the introduction of intralesional injection of hydrocortisone it was decided to utilize this method in the treatment of granuloma annulare.

The first patient treated in this manner showed complete clearing of all lesions despite the fact that he had previously failed to benefit from a great many forms of therapy. Some of the lesions of our second patient were injected with normal saline solution, to act as a control. Both the test and control areas returned to normal. The next four patients were treated by intralesional injections of normal saline, procaine, lidocaine or sterile distilled water. Involution of the tumors was induced in three of the cases and in the fourth there was improvement.

In summary, although its mode of action is not as yet understood, intralesional injections with relatively innocuous agents, such as normal saline or lidocaine, is another tool to be utilized in the treatment of granuloma annulare.

Check the date . . .

Monday, Sept. 11, 1961

SPORTS INJURY CONFERENCE

1:00 P.M. to 9:30 P.M.

at

Providence College

Under the Auspices of the

Committee on the Prevention and Treatment of Athletic Injuries

of the

Rhode Island Medical Society

Conference open to all Physicians in Rhode Island, Secondary School Coaches, Trainers, Athletic Directors and Allied Personnel

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MEDICAL MEETINGS — 1961*

PREPARED BY THE EXECUTIVE OFFICE, RHODE ISLAND MEDICAL SOCIETY, 106 FRANCIS STREET, PROVIDENCE 3, RHODE ISLAND

SEPTEMBER

11 Monday. Afternoon and evening
Sports Injury Conference, auspices of Rhode Island Medical Society, at Providence College.

15-16 Friday and Saturday
New England Society of Anesthesiology at Wentworth-by-the-Sea, New Hampshire.

18 Monday, at 6:00 P.M.
Council Meeting, Rhode Island Medical Society.

22-23 Friday and Saturday (Friday afternoon and Saturday morning)
New England Regional Blue Shield Public Relations Conference, at Providence.

27 Wednesday, at 8:00 P.M.
House of Delegates Meeting, Rhode Island Medical Society.

OCTOBER

2-6 Monday-Friday. All week
College of Surgeons annual meeting, at Chicago.

3-5 Tuesday-Thursday
Rhode Island Conference of Social Work, Providence, Sheraton-Biltmore Hotel.

5-7 Thursday-Saturday
New England Regional meeting, College of Obstetrics and Gynecology, at Boston.

9 Monday, at 8:30 P.M.
Providence Medical Association meeting, at the Medical Library.

11 Wednesday (pending)
Pediatric Day, at Roger Williams Hospital

15 Sunday. Afternoon
Family Day, Rhode Island Medical Society Auxiliary and the Society, Anderson Farm, Coventry, Rhode Island.

18 Wednesday, at 8:30 P.M.
Gerber Oration, at Miriam Hospital

25 Wednesday. All day
J. F. Kenney Clinic Day, at Memorial Hospital.

NOVEMBER

1 Wednesday, 10:00 A.M.-6:00 P.M.
Rhode Island Chapter, Academy of General Practice, at Colony Motor Hotel.

6 Monday, at 8:30 P.M.
Providence Medical Association meeting, Medical Library.

7-9 Tuesday-Thursday
New England Postgraduate Assembly, Boston Statler Hotel.

11 Saturday. Evening
(Armistice Day) Auxiliary Dinner Dance, Sheraton-Biltmore Hotel.

12-17 Sunday-Friday
American Public Health Association annual meeting, at Detroit, Michigan.

23 Thursday
Thanksgiving Day.

27 November-1 December Monday-Friday
American Medical Association Clinical Session, at Denver, Colorado.

29-30 Wednesday-Thursday
Joint Conference on Prevention of Disability, at Rhode Island Hospital.

DECEMBER

4 Monday, at 8:30 P.M.
Providence Medical Association meeting, at Medical Library.

* Subject to changes and additions.

Reading time: 1 minute

BRIEFS

FROM THE PHYSICIANS SERVICE PLAN OF THE RHODE ISLAND MEDICAL SOCIETY

Some Thoughts Worth Considering . . .

50 REQUESTS TO DONATE EYES . . .

Following "To See Again"— the first in a series of three documentary public service television programs sponsored by Blue Cross and Physicians Service — almost 50 requests have been received from Rhode Islanders wishing to donate their eyes after death. Requests for information were received by Rhode Island Hospital, Woonsocket Hospital, Roger Williams Hospital, Pawtucket Memorial Hospital, South County Hospital and Kent County Hospital. Also, the Boston Eye Bank reported that many letters and phone calls were received.

. . . **"SAVING A BLUE BABY BY OPEN HEART SURGERY"** will be televised on Monday evening, July 3rd on WJAR-TV (Channel 10) from 10 to 11 p.m. Suffering from a heart condition that would have resulted in early illness and death, this Blue Baby undergoes heart surgery and is restored to health.

* * * * *

9 OUT OF 10 RHODE ISLAND OLDSTERS PROTECTED . . .

Almost 94 per cent of the self-supporting Rhode Islanders are enrolled under Blue Cross and over 77 per cent under Physicians Service.

Our senior citizens need protection against hospital and doctor bills — usually even more than younger persons. And Blue Cross-Physicians Service has protected this growing group of "oldsters" like no other organization. For example:

1. Once a person is a member, there is no age limit.
2. There is no reduction of benefits because of age.
3. There is no increase of membership fees because of age.
4. When a member leaves a group plan, he can continue Blue Cross-Physicians Service protection.

These are just a few reasons why Blue Cross-Physicians Service is the best answer to community health problems . . . and the answer to growing threats of socialism.

* * * * *

THE REAL ISSUE IS QUALITY

"Hospitals must continue their efforts to improve operating economy and to avoid unnecessary admission of patients. But even if such faults as may be present can be corrected, hospital costs are not likely to decrease in the future — not if the public is to have good hospital care in time of illness. Quality, not cost, is the real issue."

—George Bugbee, President
Health Information Foundation

JULY, 1961

RHODE ISLAND

Medical Journal

Medical Economics Issue . . .

Volume XLIV, No. 7
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inside as well as outside the hospital...
staphylococci usually remain sensitive to

CHLOROMYCETIN

(chloramphenicol, Parke-Davi

That the sensitivity patterns of "street" staphylococci differ widely from those o "hospital" staphylococci is a well-established clinical fact.[1-5] Although strains o staphylococci encountered in general practice have remained relatively sensitive t a number of antibiotics,[6] the problem of antibiotic-resistant staphylococci appea to be a threat to all patients in hospitals today. It is encouraging to note, howeve "...that a relatively small percentage of strains develop resistance to chloram phenicol, despite the consumption of large amounts of this antibiotic."[7]

In one hospital, for example, CHLOROMYCETIN "...was the only widely use antibiotic to which few of the strains were resistant."[8] In another hospital, despit steadily increasing use of CHLOROMYCETIN since 1956, "...the percentage o chloramphenicol-resistant strains has actually been lower in subsequent years." Elsewhere, insofar as hospital staphylococci are concerned, it appears that "...th problem of antibiotic resistance can be regarded as minimal for chloramphenicol."

CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, includin Kapseals® of 250 mg., in bottles of 16 and 100.

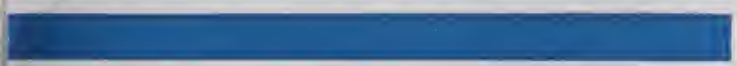
See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopeni granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias hav occurred after short term and with prolonged therapy with this drug. Bearing in mind the possibility th such reactions may occur, chloramphenicol should be used only for serious infections caused by organism which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other le potentially dangerous agents will be effective, or in the treatment of trivial infections such as colds, infl enza, viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. Whi blood studies may detect early peripheral blood changes such as leukopenia or granulocytopenia, befo they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior t development of aplastic anemia.



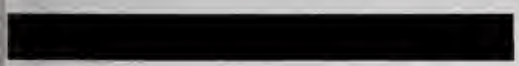
IN VITRO SENSITIVITY OF 250 STRAINS OF STAPHYLOCOCCI TO CHLOROMYCETIN AND TO FOUR OTHER ANTIBIOTICS*



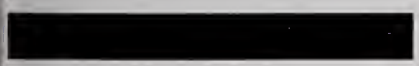
CHLOROMYCETIN 78%



Antibiotic A 68%



Antibiotic B 55%



Antibiotic C 45%



Antibiotic D 21%

These strains of coagulase-positive staphylococci were isolated from hospitalized patients at a large county hospital during the year 1959. Sensitivity tests were done by the disc method.

*Adapted from Bauer, Perry, & Kirby[1]

References: (1) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (2) Fisher, M. W.: *Arch. Int. Med.* 105:413, 1960. (3) Cohen, S.: *Circulation* 20:96, 1959. (4) Edwards, T. S.: *Am. J. Ophth.* 48, Part II:19, 1959. (5) Smith, I. M.: Staphylococcal Infections, Chicago, The Year Book Publishers, Inc., 1958, p. 148. (6) Petersdorf, R. G.; Rose, M. C.; Minchew, H. B.; Keene, W. R., & Bennett, I. L., Jr.: *Arch. Int. Med.* 105:398, 1960. (7) Editorial: *J.A.M.A.* 173:544, 1960. (8) Finland, M.; Jones, W. F., Jr., & Bennett, I. L., Jr.: *Arch. Int. Med.* 104:365, 1959.

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BRIEFS

FROM THE PHYSICIANS SERVICE PLAN OF THE RHODE ISLAND MEDICAL SOCIETY

Some Thoughts Worth Considering

PHYSICIANS MUST BE CONCERNED . . .

Physicians must be concerned with improper or incompetent practice and with unethical actions of every nature. By far the most frequent cases involving the grievance committees are those of alleged overcharging. Other complaints by patients include abuse of health insurance, failure to respond to requests for services, and unnecessary service.

— Dr. Leonard W. Larson, President-elect AMA
AMA House of Delegates, June 26, 1961

COMPREHENSIVE STATE STUDY . . .

Following weeks of intensive examination of Blue Cross and Physicians Service operations, the State Department of Business Regulation recently released a 58-page, documented report. Some excerpts from the report:

"SERVICE" IS ADVANTAGE . . .

"From the subscriber's point of view, one of the greatest advantages offered by Blue Cross and Physicians Service is that they promise, to a substantial degree, a 'service' contract — they contract to provide certain services, regardless of cost."

MORE FUNDS AVAILABLE . . .

"Any savings in operating costs leaves more funds available for benefits to subscribers. On the basis of a recent study, the administrative cost per member was 6.3¢ (per year) for Blue Cross, as compared to the national average of 12.2¢ for all plans and an average of 11.8¢ for plans of the same size. While these differences in cents per subscriber may seem small, when applied to hundreds of thousands of subscribers, the result is very substantial in amounts of money."

The RHODE ISLAND MEDICAL JOURNAL

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THESE 29,000 PEOPLE IN RHODE ISLAND NEED MEDICAL HELP

Heart disease, cancer, mental illness—everyone knows the nation's three major medical problems. Do you know that alcoholism ranks fourth? In the state of Rhode Island there are at least 29,000 alcoholics. These people need medical help. No one is in a better position to initiate and supervise a program of rehabilitation than the physician who enjoys the confidence of the patient or the patient's family.

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Thiomine, mg.	0.5	50
Riboflovin, mg.	0.6	50
Niacinamide, mg.	5	50
Calcium, Gm.	0.5	67
Phosphorus, Gm.	0.4	53
Iron, mg.	4	40
Iodine, mcg.	60	60

Vitamin E (Int. Units)	2.5
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Vitamin B_{12}, mcg.	0.5
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Sodium, Gm.	0.2
Potassium, Gm.	0.9
Copper, mg.	0.5
Monganese, mg.	1
Fiber, Gm.	0.55

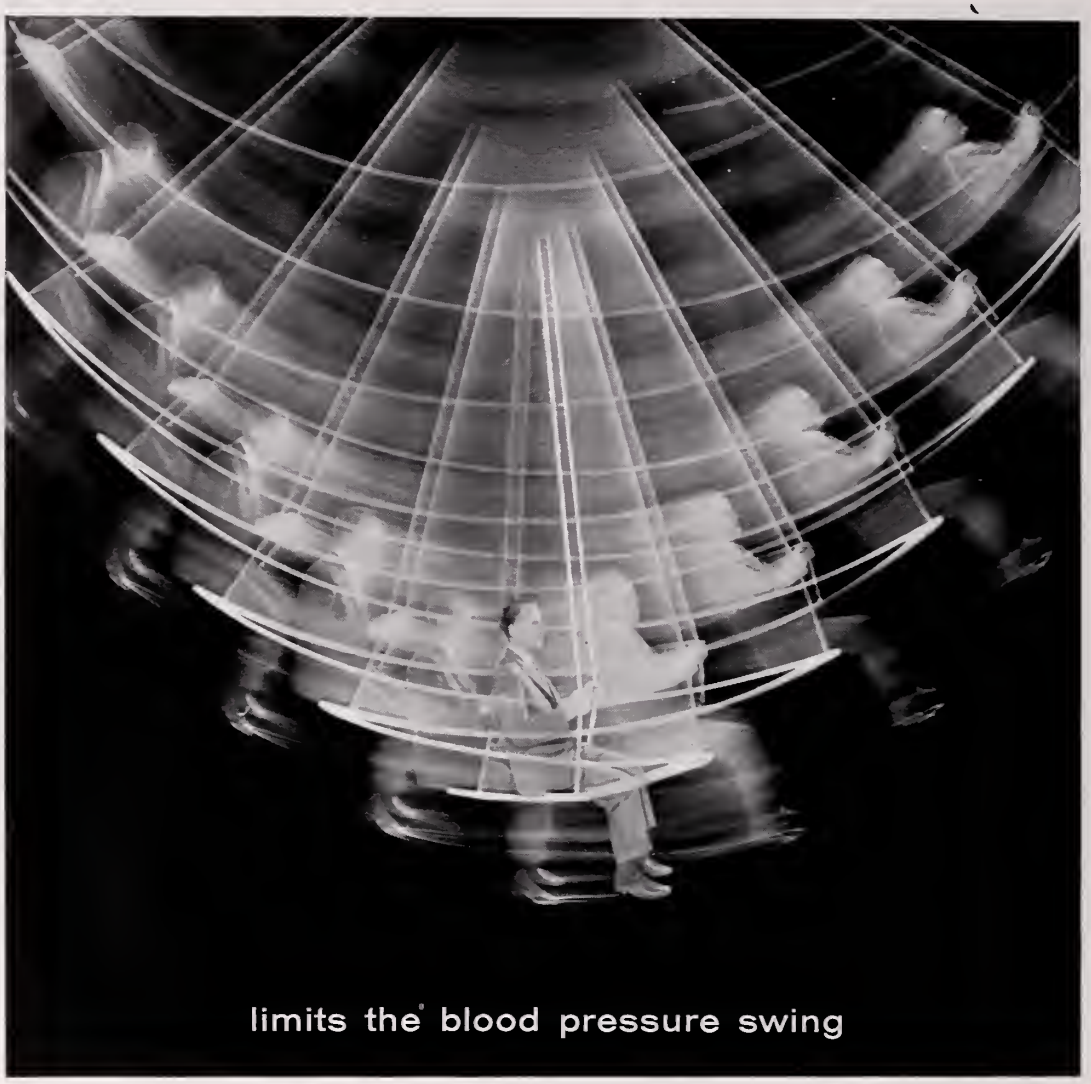
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references: (1) Nelson, W. E.: Textbook of Pediatrics, ed. 7, Philadelphia, W. B. Saunders Company, pp. 231-233, 1959. (2) Parrott, R. H., and Nelson, W. E.: *ibid.*, p. 759. (3) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (4) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (5) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960.

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THE WASHINGTON SCENE

A Report Prepared by the Washington Office of the American Medical Association

THE American Medical Association supported the Kennedy Administration's proposal to provide $750 million in matching funds for construction of medical, dental, public health and osteopathic schools.

In a letter to Senator Lister Hill (D., Ala.), chairman of the Senate Labor and Public Welfare Committee, Doctor F. J. L. Blasingame, executive vice president of the A.M.A., said:

"As an Association of 179,000 practicing physicians, we are vitally interested in maintaining the high quality of medical education in the United States because of its direct relationship to medical care. For over a century, the American Medical Association has been actively and effectively engaged in the improvement of medical education in the United States. It can now be said, with assurance, that medical education in this country is superior to that found anywhere else in the world. It is not a coincidence that the improved standards of medical care in the last half century saw the elimination of substandard medical schools and diploma mills which had been turning out graduates in large numbers. This improvement in medical education is the result of the vigorous efforts of this Association and other interested organizations.

"We strongly believe that increased attention must be given to the adequacy of physical facilities, the availability of qualified instructors and the availability of teaching material and patients for the clinical phases of medical education if high standards of medical education are to be maintained. Any attempt to increase the number of medical students without regard to these conditions will result in a lowering of the standard of medical education. We are of the firm conviction that increase in the physical facilities available for medical education should be given priority at this time over any other federal legislation in the field of medical education.

"We believe that there is need for assistance in the expansion, construction and remodeling of the physical facilities of medical schools and, therefore, a one-time expenditure of federal funds on a matching basis, where maximum freedom of the school from federal control is assured, is justified."

The A.M.A. opposed a provision that might encourage medical schools to expand too rapidly. Doctor Blasingame said: "It is quite possible that a forced increase in freshman enrollment would be detrimental to the quality of medical education."

The Association didn't take a position on the provision of the administration legislation that would provide federal scholarships to medical students. However, Doctor Blasingame described to the senate committee A.M.A.'s new medical scholarship and student loan programs.

* * *

Medicare Program

The General Accounting Office found the Defense Department's Medicare program being conducted generally "in a satisfactory manner," but recommended some changes designed to correct what it considered "important deficiencies."

The army, which administers the program of medical care for dependents of members of the armed services, took steps to put into effect most of the recommendations of the G.A.O., which audits federal spending for Congress.

However, Medicare officials rejected a G.A.O. proposal for a change in physician fees.

"Our review disclosed that physicians' claims for medical care are, in general, significantly higher in states where maximum fees are made known to physicians than in those states where maximum fees are not made known," the G.A.O. reported. "We estimate that there is an additional cost of as much as $3 million to $4 million annually as a result of maximum fees, rather than normal fees, being charged in the states where fee schedules are distributed to the physicians."

The G.A.O. recommended that lower fixed fee schedules be negotiated for states where a high percentage of physicians' claims are for maximum allowable fees, "subject to being raised only on the basis of clearly supported evidence of higher normal fees."

If lower fees cannot be negotiated, the G.A.O. said, efforts should be made "to have the state medical society or other appropriate parties accept the responsibility for determining that physician claims are generally not in excess of their normal charges."

concluded on page 390

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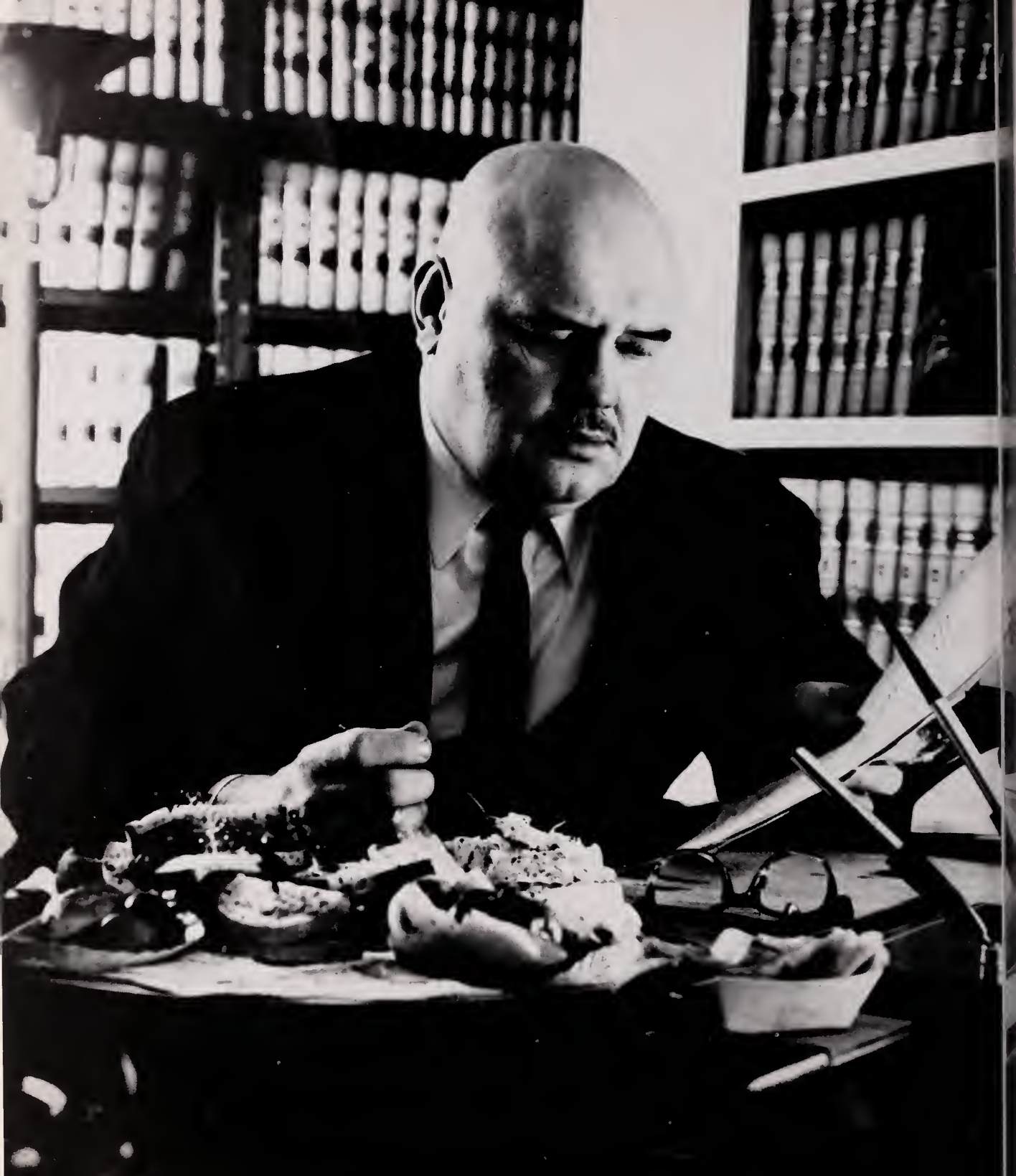
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for example:

SPECIAL PROBLEM: ANXIETY-TENSION

When triamcinolone was used, euphoria and psychic unrest rarely occurred. (McGavack, T. H.: *Clin. Med.* 6:997 [June] 1959.)

SPECIAL PROBLEM: OVERWEIGHT

No patient developed voracious appetite on triamcinolone. Preferable for the overweight person whose appetite is undesirably stimulated by other steroids. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

SPECIAL PROBLEM: EDEMA

Since it does not produce edema, triamcinolone is useful in rheumatoid arthritis patients with cardiac decompensation who need steroid therapy. (Hollander, J. L.: *J.A.M.A.* 172:306 [Jan. 23] 1960.)

SPECIAL PROBLEM: HYPERTENSION

Triamcinolone may be included among the currently available antirheumatic steroids having the least tendency to cause sodium retention. (Ward, L. E.: *J.A.M.A.* 170:1318 [July 11] 1959.)

Hypertension did not result from triamcinolone therapy. Existing hypertension was reduced sometimes. This may have been due to lack of sodium retention. (Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: *Arthritis & Rheumatism* 1:215 [June] 1958.)

Precautions: Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of rheumatoid arthritis, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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BOOK REVIEWS

PHARMACOLOGY. The Nature, Action, and Use of Drugs by Harry Beckman, M.D. Second Edition. W. B. Saunders Co., Phil. and London, 1961. $15.50

After a brief review of how drugs act in general, an attempt was made to group certain compounds under broad disease headings and others according to their primary action. This fact impressed function upon the reader while introducing currently useful drugs. These were all discussed briefly. A selected bibliography at the end of each chapter was an effort at completeness and adequacy of presentation.

Time-honored compounds were dealt with according to their therapeutic order of importance today, while emphasis was placed upon the more recent contributions to our clinical armamentarium. Countless drugs were thus touched upon within the span of 805 pages. Easy reference to each of these was possible by simply a turn to the complete index of drugs at the end of the book.

I believe that the author has succeeded in organizing data useful to both the busy clinician and medical student. No pretense at completeness was made. More detailed works must be consulted if the comments made fail to answer the individual clinical problem as fully as desired.

ALBERT F. TETREAULT, M.D.

INSTRUCTIONAL COURSE LECTURES, Volume XVII, 1960. Edited by Fred C. Reynolds, M.D. The American Academy of Orthopaedic Surgeons. The C. V. Mosby Co., St. Louis, 1960. $18.50

This is a 421-page book containing most of the instructional course lectures given at the 1960 annual meeting of The American Academy of Orthopaedic Surgeons. The book is exceptionally well written and makes for easy, interesting reading. The contents of the book are divided into five main parts dealing with fractures, bone graft surgery, children's orthopaedics, athletic injuries, and miscellaneous subjects.

The lectures dealing with fractures of the elbow in children together with the diagnosis of arterial injury in the extremities contain a considerable amount of valuable information. It is emphasized that in complicated fractures of the supracondylar section of the elbow in children manipulation and remanipulation should be avoided when the nerve supply and blood supply are jeopardized because of the danger of further damage to the circulation which already has a limited margin of safety. In these cases the authors recommend primary skeletal traction as the initial form of treatment. In addition important suggestions are made in the handling of fractures of the capitellum, medial epicondyle, upper end of the radius, olecranon, Monteggia fractures, and so forth.

The section dealing with the management of fractures of the neck of the femur contains a considerable amount of valuable information. This particular chapter not only describes in detail the management of the various types of fractures of the neck of the femur but it also enumerates the complications which may take place in the handling of these fractures. With reference to the insertion of prostheses, the authors state that replacement prostheses in hip fractures have a definite but limited place. One criticism that might be offered is that some of the authors state that an open reduction is seldom if ever necessary in the treatment of fresh fractures of the neck of the femur and yet one of the authors states that he does an open reduction on 85 per cent of his cases. This wide variance of opinion is apt to confuse the young orthopaedist.

The section dealing with bone graft surgery should prove of extreme interest to the student of the scientific phase of bone grafting. The different methods of operative procedure and indications are enumerated in this section together with well-documented case reports giving the indications for the different types of bone grafts in use.

The section dealing with children's orthopaedics is of particular interest because it gives a very excellent account of bone growth, the factors involved and the various methods used in its control. Doctor Blount's lecture on unequal leg length is of particular interest.

A well-written section is included on the management of the child amputee. This particular section recommends that a child amputee be fitted with a prosthesis early in life in order to avoid functional substitution patterns which the child may be unwilling or unable to abandon later on in life.

Another section which I found quite interesting is the one dealing with the surgical approaches to the cervical spine. Doctors Robinson and Southwick give an excellent dissertation on the indica-

concluded on page 390

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BOOK REVIEWS

concluded from page 388

tions for operative intervention in various conditions affecting the cervical spine, and they relate the method of approach for such procedures as biopsy of the vertebral bodies, anterior removal of intervertebral discs, interbody fusion, open reduction, stabilization with or without laminectomy, occipitocervical fusion, foraminotomy in disc excision from the dorsolateral aspect, and biopsy or drainage of the body of C1 and C2 from the pharynx.

For those who are interested in disability evaluation they will find that section four of the book contains information which will help in reaching conclusions as to the amount of disability present in the injured person. The reading of this particular chapter and mastering it will prove helpful in avoiding embarrassment in litigated cases.

The last section deals with athletic injuries. In this section many of the injuries which are peculiar to athletes are discussed together with the mechanism that causes them and the methods used by the authors in their prevention and treatment. This particular chapter should prove of interest to the physician or surgeon who is a high school or college team physician.

I recommend unreservedly the reading of the book because it is not only well written and interesting, but because it contains a wealth of valuable information which should prove of value both to the established orthopaedist and to young physicians and residents who are interested in orthopaedic problems and traumatic surgery. In addition, the book is exceptionally well illustrated.

A. A. Savastano, M.D.

HANDBOOK OF MEDICAL TREATMENT
edited by Milton J. Chatton, M.D., Sheldon Margen, M.D. and Henry Brainerd, M.D. Lange Medical Publications, Los Altos, Calif., 1960. Seventh ed. $3.50

This is the latest edition of this excellent handbook which is revised every two years. It is truly a handbook, measuring seven by four inches, and may be easily carried in a coat pocket or the physician's bag. Although it runs to over 570 pages, the print is sharp and, because of its concise and direct style, it reads easily.

The first four chapters are concerned with the medical aspects of medical management, including dietetics, nutrition, and fluid and electrolyte therapy. The discussion of acid-base regulation is outstanding, and the many clinical aspects of this are outlined. The changes in extracellular and intracellular fluid and electrolyte concentrations are described simply and clearly in terms of treatment of the seriously ill patients. This section of the handbook would be a great help in the middle of the night when the medical resident is off call and the hospital biochemist is not available, and the diabetic patient is becoming more acidotic and comatose.

This handbook then gives brief descriptions of diseases of the different systems with the approach to their treatment. Drugs are discussed by trade names, and there are tables describing the actions and side effects of many of the latest medications. Certain sections, such as those on endocrine diseases and the blood and lymphatic system, are outstanding.

The section on psychiatric disturbances — so common in medical practice — seems to me to be too brief and superficial. Also, the binding of this book is light, and one wonders how well it will stand up to the vigorous use which this text should get.

Why doesn't some enterprising concern contract with the physician to deliver the new edition of this kind of text automatically with each new publishing? Nothing is more vexing than to find that the available text is just too old to furnish recent specific information when called upon to do so.

John A. Dillon, M.D.

THE WASHINGTON SCENE

concluded from page 384

The G.A.O. further recommended that "physicians be required to certify on each claim that the amount billed does not exceed the physician's normal fee for the medical care furnished."

The army disagreed, saying that it believed "the present contracting concept is the most suitable to meet the requirements and is in the best interests of the government."

The A.M.A. noted that it had held from the outset that "fixed fee schedules would result in a more expensive program than if physicians were permitted to charge their normal fees."

Fixed fee schedules call for some fees above some so-called normal fees and others below average fees, the A.M.A. said, "physicians tend to 'balance out' by using fees listed in the fixed fee schedule."

Medicare was started December 7, 1960. During the first four years of the program, $130 million was paid to civilian doctors and $133 million to civilian hospitals for care of 1.1 million military dependents. Maternity cases accounted for about half the total.

Medicare has asked Congress for $73.2 million for the fiscal year 1962 beginning this July 1. This is a $6.9 million increase over Medicare's current budget. The increase is needed, Medicare said, because of more military dependents eligible for the program's benefits and increases in the costs of services.

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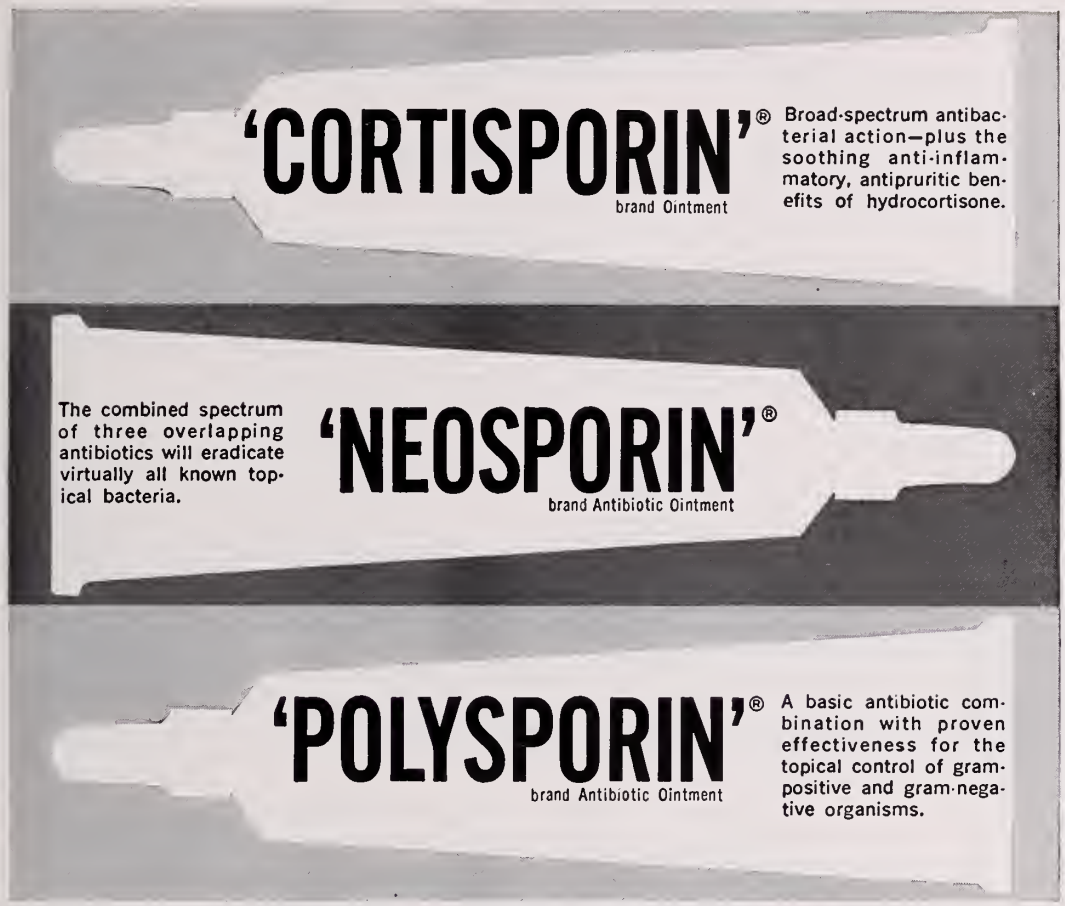
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Scanning the Medical Literature . . .

ABSTRACTS FROM PAPERS WRITTEN BY RHODE ISLANDERS

DEMYELINATING ENCEPHALOMYELITIS IN A CASE OF TETANUS TREATED WITH ANTITOXIN. Harold W. Williams and Francis H. Chafee. New England J. Med. 264:489, 1961

The finding of multiple pinpoint perivascular demyelinative lesions in the white matter of the brain of a patient who had clinical tetanus provoked interest in the possible relation to tetanus antitoxin which he had received. The literature was reviewed. Perivascular demyelinization is known to be a rare complication of measles, rubella, and scarlet fever. It is seen rarely after immunization against smallpox and rabies, and is known to occur after the administration of tetanus antitoxin. In experimental allergic encephalitis a characteristic perivascular encephalomyelitis is obtained after the injection of myelin, a substance normally found in brain tissue. The perivascular lesions are quite similar to those resulting from measles and smallpox immunization as well as to those described in our patient. This response to many stimuli is best explained as an allergic reaction. Our patient also demonstrated urticaria and angioedema from the eighth through the eleventh day of his illness which was impressive since the neuropathologist, unaware of this clinical reaction, independently dated the generation of the perivascular lesions as occurring by the ninth day, or four days before death. The authors conclude that this allergic response to tetanus antitoxin may occur more often than has been recognized. The uncritical use of tetanus antitoxin should be curbed.

HERPES SIMPLEX. Method of Arthur B. Kern. In: CURRENT THERAPY—1960. Edited by Howard F. Conn. W. B. Saunders Co., Phil., 1960. P. 466

The initial infection of herpes simplex occurs usually between two and five years of age. In most instances this goes unrecognized but in a small percentage of cases it is accompanied by severe local and systemic manifestations. Many clinical entities including acute gingivostomatitis, acute vulvovaginitis and generalized herpes simplex are manifestations of the primary infection.

Treatment of primary herpes simplex is symptomatic, no specific therapy being available. Measures include compresses with Burow's solution and colloidal oatmeal baths to hasten the healing of cutaneous vesicles, antibiotic ointments for secondary infection, in the more severe cases systemic antibiotics to prevent secondary infection and parenteral fluids to prevent dehydration and acidosis, and local anesthetics for ulcerative oral lesions. Steroids are contraindicated.

Following subsidence of the primary infection the virus remains dormant within the tissues. Under certain conditions it may be activated to produce recurrent herpes simplex. This manifests itself most frequently on the skin of or about the lips although many other areas may be involved.

Treatment includes Burow's solution compresses to induce drying of the vesicles and an antibiotic cream to prevent secondary bacterial infection. Steroids are contraindicated. Prevention of recurrent attacks involves first, elimination of all known aggravating factors and second, multiple smallpox vaccinations.

Excerpts from the *Preface on Doctors* by GEORGE BERNARD SHAW, written for *The Doctor's Dilemma*

The following were penned in 1911, a generation before socialized medicine had entered the public awareness.

1. Nothing is more dangerous than a poor doctor; not even a poor employer or a poor landlord.
2. Of all the anti-social vested interests the worst is the vested interest in ill-health.
3. Remember that an illness is a misdemeanor; and treat the doctor as an accessory unless he notifies every case to the Public Health Authority.
4. Treat every death as a possible and, under our present system, a probable murder, by making it the subject of a reasonable conducted inquest; and execute the doctor, if necessary, as a doctor, by striking him off the register.

concluded on page 396

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ABSTRACTS

concluded from page 394

5. Make up your mind how many doctors the community needs and keep it well. Do not register more or less than this number, and let registration constitute the doctor a civil servant with a dignified living wage paid out of public funds.
6. Municipalize Harley Street.
7. Treat the private operator exactly as you would treat a private executioner.
8. Treat persons who profess to be able to cure disease as you treat fortune tellers.
9. Keep the public carefully informed, by special statistics and announcements of individual cases, of all illnesses of doctors or in their families.
10. Make it compulsory for a doctor using a brass plate to have inscribed on it, in addition to the letters indicating his qualifications, the words, "Remember that I too am mortal."
11. In legislation and social organization, proceed on the principle that invalids, meaning persons who cannot keep themselves alive by their own activities, cannot, beyond reason, expect to be kept alive by the activity of others. There is a point at which the most energetic policeman or doctor, when called upon to deal with an apparently drowned person, gives up artificial respiration, although it is never possible to declare with certainty, at any point short of decomposition, that another five minutes of the exercise would not effect resuscitation. The theory that every individual alive is of infinite value is legislatively impracticable. No doubt the higher the life we secure to the individual by wise social organization, the greater his value is to the community, and the more pains we shall take to pull him through any temporary danger or disablement. But the man who costs more than he is worth is doomed by sound hygiene as inexorably as by sound economics.
12. Do not try to live forever. You will not succeed.
13. Use your health, even to the point of wearing it out. That is what it is for. Spend all you have before you die; and do not outlive yourself.
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* * *

(*Postscript*, 1930) During the years which have elapsed since the foregoing preface was penned, the need for bringing the medical profession under responsible and effective public control has become constantly more pressing as the inevitable collisions between the march of discovery in therapeutic science and the reactionary obsolescence of the General Medical Council have become more frequent and sensational.

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(Abstracted from *Selected Papers and Addresses*, by WILLIAM W. KEEN, M.D., published by Geo. W. Jacobs & Co., Philadelphia, 1923)

"In our Civil War Duncan quotes the figures of Fox, which are 'the latest revised statistics and are all larger than those of the Medical and Surgical History of the War.' The average strength of the Union Armies was 806,755, and the deaths 359,528, of whom 67,058 were killed in battle and 43,012 died of wounds. This gives a battle death rate of 33 per 1,000 per annum. The disease death rate was 65 per 1,000 per annum. The case death rate from disease was only 3.4 per cent, a very low figure.

"I can testify to the excellent condition of the Civil War hospitals, of which I saw many, but only in the East. When I say 'excellent condition' it must be with the reserve that we knew nothing as to bacteriology, which did not exist, nor of infection, which was utterly unknown as to its causes and prevention. The general sanitary conditions, and by this I mean shelter, ventilation, cleanliness, good food, as good nursing as intelligent orderlies could give, etc., were all excellent. But the surgical conditions as we *now* know were simply dreadful. Practically every wound suppurated, and in summer I have seen many wounds swarming with squirming maggots as large as chestnut worms — disgusting, but fortunately, not especially dangerous.

"In my *Surgical Reminiscences of the Civil War* I have given many statistics taken from the official Medical and Surgical History of the War, a few of which I will reproduce that you may see what blessed conditions you 'free born' men have inherited. Pyemia (blood-poisoning) was one of our worst scourges. There were 2,818 cases, and of these only 71 recovered, a death rate of 97.4 per cent. Few of you probably have seen even one such case. I have given a matter-of-fact description of it in my *Surgical Reminiscences*, but if you wish to see it sketched by a master's hand read that most touching and beautiful of all medical stories I know — 'Rab and his friends,' by dear old Dr. John Brown, of Edinburgh. He vividly paints the sudden change in the wound, the pulse, the eye, the mind, on and on, worse and worse, until 'that *animula, blandula, vagula, hospes comesque* was about to flee.'

"Tetanus had a mortality of 89.3 per cent. Of amputations at the hip-joint 83.3 per cent died. Trephining had a mortality of 61 per cent. Even of ligations of the femoral artery, 374 in number, 281 died, or over 75 per cent. Of 2,235 cases of secondary hemorrhage, 61.7 per cent died. Hospital gangrene, of which there were several hundred cases, had only a mortality of about 25 per cent, because we early learned the correct though empirical treatment, viz., the application of the actual cautery, pure bromine, strong nitric acid or similar destructive agents which killed the germ."

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VOL. XLIV JULY, 1961 NO. 7

The Twentieth Charles V. Chapin Oration . . .

THE CHANGING SCENE IN MEDICAL EDUCATION AND PRACTICE*

ALEX M. BURGESS, M.D.

The Author, *Alex M. Burgess, M.D. of Providence, Rhode Island. Director of Professional Education, Miriam Hospital, Providence, and Memorial Hospital, Pawtucket; Area Consultant, Veterans Administration; Secretary-Treasurer, Association of Hospital Directors of Medical Education; Vice-Chairman, National Committee for Resettlement of Foreign Physicians; Former member and Vice-Chairman, Joint Commission for Accreditation of Hospitals; Former member, American Board of Internal Medicine; 2nd Vice-President, American College of Physicians; 1953-54; Past President, New England Diabetes Association, Providence Medical Association, and Rhode Island Alpha of Phi Beta Kappa.*

Man roamed the forest barefoot
But now wears leather boots
And when he kills his neighbor
He takes a gun and shoots
It really makes one wonder
Which way he evolutes
He really is the same old man.†

TIMES HAVE CHANGED but man has remained essentially the same. His fears and his worries are still with him. He faces danger, illness and the thought of death about as he always has. It is a question as to whether in courage, in fortitude and in carrying on his affairs generally, he has made any progress whatever — or has retrogressed. Progress of course involves change — but change, the continuous change of our changing times is an admixture of progress and retrogression. In our darker moments those of us who have watched for a half century the changes in national and community life and in American medicine are often too impressed with the retrogressive features of the times as we fatuously long for the "good old days." Progress we all recognize, but many of us can sense also the retrogression. We shall consider both of these aspects of the present day scene in the field of medicine with especial reference to medical education and medical practice in the United States.

*Delivered at the 150th Annual Meeting of the Rhode Island Medical Society, at the Medical Library, Providence, Rhode Island, on May 2, 1961.

†(*Adventures of Pithecanthropus.* Anon.)

As this presentation is primarily for the purpose of honoring the memory of Doctor Charles V. Chapin, whom we may call the greatest physician that Rhode Island has produced, it is well to recall his relationship to medical education. With his epoch-making studies in the transmission of infections we are all familiar — studies by which he taught the whole world. Perhaps we are not fully aware, however, that in the more conventional sense Doctor Chapin was a teacher. He served as professor of physiology at Brown for ten years beginning in 1886 when he was thirty years old. He was lecturer at Harvard Medical School in 1909, at the combined school for health officers of Harvard and the Massachusetts Institute of Technology from 1913 to 1922 and at the Harvard School of Hygiene from 1923 to 1935. He was indeed a teacher, and I remember well the remark of my uncle, Doctor George A. Sargent of Boston, when as a student I accompanied him to a meeting at which Doctor Chapin spoke. "He is ten years ahead of us all" said my uncle "and he is teaching us a great deal."

Medical Education in Chapin's Era

Let us look, then, at Medical Education and at medical practice as it was in the days when Doctor Chapin first taught at Harvard, 1909, and at what has happened since then in these two closely related fields. In the year 1909 I was a senior medical student at Harvard Medical School. Most of us who have been active in the medical field during the past fifty years can view the medical scene in perspective. Doubtless no two of us have come to exactly the same conclusions, but I believe that on the whole we would be found to be in agreement. I shall therefore set forth my own opinions limiting my discussion to the field of medical education, particularly graduate and postgraduate education, and to medical practice. I shall try to tell you what I have seen, what now I see and what I anticipate.

I shall not spend much time in discussing undergraduate education in the medical schools. Here the changes that have taken place have been occa-

continued on next page

sioned (for the most part) by such great advances in so many directions that it is well nigh impossible for an individual to do more than get a general view of the scientific basis on which the application of medical treatment rests. Four years of medical school and a year of internship was an adequate preparation for practice in 1910. Now it is merely a beginning, and even if one intends to remain in general family practice a minimum of two years graduate training is recommended.

Beginning, then, with medical education, it will be recalled that in 1910, the year of my graduation from medical school, the famous report of Abraham Flexner appeared with the resulting elimination of most of the really substandard medical schools. The work of these schools is not familiar to me and I am not competent to discuss them. In that day a small number of graduates of even the best medical schools went directly into practice, but most of them served in internships of from one to two years duration. Some of these were "straight" and some rotating. Appointments (as a rule) were staggered so that as he neared the end of his service the senior intern, "house physician" or "house surgeon" as he was called, was given a rather high degree of responsibility and occupied essentially the position now held by the chief resident. As the years have gone on and as diagnostic and therapeutic techniques and procedures have become more refined and numerous, and the mass of information needed to understand them and to put them to use has become so very extensive, the years of training have increased. To prepare a man to practice surgery or internal medicine nowadays a period of time is required in which his predecessor of fifty years ago would have come to consider himself rather a seasoned practitioner. All this extension and refinement of training and the great advances in medical knowledge on which they are based has of course resulted in more effective treatment and the extension of many lives that would have been lost because of diseases which now are curable. We are all very familiar with these facts. They indicate progress — great progress. What of retrogression? Has there been any? The answer is yes. It is certainly not great in comparison with the advances but most of us who were students in the old days are conscious of it and are trying to prevent it. Where are the Fred Shattucks, the George Sears and the William Oslers of the old days? True, many of their medical descendants are still on the job, trying to preserve and pass on their clinical virtues, but the task is well nigh impossible. Too often ward rounds and conferences are, of necessity, so filled with a discussion of the results of many and varied laboratory investigations that there is not really time to give attention to the patient himself, his fears, his worries and the details of his physician findings. The eye that can read the colorimeter and interpret the electrocardiogram often fails to notice physical asymmetry, visible peristalsis, the minor variations in muscle spasm or the like. The ear that hears the routine story of previous illnesses and operations often is unable to detect the tremor in the voice or the terror that the new experience of being a hospital patient may have engendered. Both in being able to realize that his unfortunate patient may be a fellow who needs a friend more than a sedative and to detect by the use of trained observation in preference to laboratory tests the real nature of his patient's condition, there has been a retrogression, a loss of competence that is rather striking. One has only to watch the average recent graduate carry out a physical examination to realize that percussion, for example, is becoming a lost art, and dependence on the laboratory, X-ray and other aids have so undermined the confidence of many a young physician in his ability to see and hear and feel that without these mechanical aids, he hesitates to form an opinion. Not long ago in participating in the oral examination of the Board of Internal Medicine I had completed my session with a young candidate who seemed to me to have a most complete grasp of modern medicine and to whom I was ready to accord a very good grade. To my astonishment my colleague who had examined the physician on his study of another patient and who is a most distinguished internist who has himself introduced biochemical diagnostic procedures of great value said to me, "I am sorry but I cannot pass this young man." When I stated my good opinion of the candidate's grasp of medicine my co-examiner said, "Yes, I know. I am sure he knows more medicine than you and I will ever know, but he missed the enlarged and nodular liver that was the most important finding in the patient he studied for me." "In my judgment," he went on to say, "when you can really get the feel of a liver it is worth more than a whole page of laboratory results."

The Specialty Boards

And what of the specialty boards? What has the whole system of specialization and certification done to medicine. Specialization has, of course, been necessary because of the vast accumulation of medical facts and techniques which have made it impossible for any one individual to be really proficient except in a limited field. Board certification, introduced to give the public a means of being certain that a physician who claims to be a specialist is really qualified in his field, has, perhaps unfortunately, been used for other purposes and is not an unmixed blessing. On the whole, I believe, its effect must be judged to have been favorable when one realizes that it has caused thousands of young physicians to continue to study and perfect themselves

and has thus made them able to give better service to the sick. The boards have certainly raised medical standards.

What of the other side, the liabilities of the situation? These too are very real. The personal tragedies of repeated failures on the part of earnest and conscientious physicians are regrettable. Furthermore, in examining large numbers of candidates by the methods that are necessary because of these very numbers, mistakes are inevitable. Many of us have seen instances in which we, with an intimate knowledge of our colleagues and their work, have recognized that it is a superior individual who has failed while another physician, definitely his inferior, has been certified. For this reason (in my opinion), it is wrong for a hospital to substitute the label of board certification for its own good judgment in considering the physicians of its own staff for advancement. Despite these drawbacks, as I have said, it is my belief that the over-all effect of the activities of the boards has been a favorable one. There are now nineteen boards. The creation of more and more boards for the certification in more and more subspecialties could easily result in the deterioration and collapse of the whole system.

What, then, has been happening during these years since the time when there were no boards and a physician certified *himself* as a specialist — basing this on his special studies — and succeeded, if he could persuade the public and his colleagues of his competence? In those days the great majority of physicians who took up specialty studies did so after a period of several years in general practice, although the beginning of residency training in the modern sense had been established in some of the larger medical centers. With the creation of more and more specialty boards, beginning with the American Board of Ophthalmology in 1916, the picture has been progressively changing. What do we now see? At present the average young graduate who intends to specialize makes a choice of the specialty in which he wishes to spend his professional life and works to complete the training indicated by the appropriate board which has determined minimum standards of time to be spent in council-approved programs. This appears to be a distinct limitation on the freedom of the individual, and in a sense it is, but it results in better work by better trained physicians and is a real protection to the patient, even though, regrettably, it may deter the occasional talented physician from traveling an unorthodox route and acquiring special skills and points of view. Furthermore, the mass of information and extensive supervised experience that are required in 1961 before a physician can be considered competent in a special field make necessary a system under which he can perfect himself, and both the public and his colleagues can be assured that he has done so.

The situation as we see it at present, then, is about as follows: A large group of graduates are taking up residency training in the various specialties. These are the figures:

Approved residencies: 31,818 in 1298 hospitals. These residencies offer training in twenty-eight different specialties.

Internships: 12,887 in 859 hospitals. 814 programs are general rotating, 32 are "mixed" and 241 "straight." A large number of graduates who are serving in these internships, as required for licensure, go into general practice. Of those who have followed this plan it is estimated that about 20% have joined the American Academy of General Practice which has made very creditable efforts to raise the level of work in this field towards the status of a specialty. This they have done by requiring extra training. It is understood that a minimum of two years' graduate work in a hospital will be required, and afterwards its members will have to show evidence of continued postgraduate educational effort to maintain their membership. We have, then, the division of the profession into the certified specialists and those who, though many of them are very competent in special fields, and many are keeping up to the standards of the Academy of General Practice have not obtained nor are training for the badge of certification and are definitely working in the field of general practice. Before we consider what this division means and will mean in the future let us think of the role of the modern hospital.

Expansion of Hospital Services

Many of us who are still active in 1961 can remember seeing abdominal operations carried out by competent surgeons in private homes. The operation may have been performed on the kitchen table, with almost any young practitioner or student "pouring the ether." This was a long time ago, a time when the most serious illnesses and most obstetric patients were well cared for, according to the standards of the day, in the houses in which they lived. Contrast that picture with the present situation. Now almost all severe illness must be treated in the hospital because detailed diagnostic and therapeutic procedures require elaborate apparatus and teamwork by many individuals. The care of serious illness, then, requires hospital care by experts. Let us consider what this means in the matter of hospital staffing and the division between specialists and generalists to which I have referred.

The small community hospital still appoints to its staff graduates of its one-year rotating internship who go into general practice in the community, *providing there are no certified specialists* applying for the same positions. In larger community hospi-

continued on next page

tals and those affiliated with universities the label of specialty certification is in almost all cases a requirement, although in senior positions there are still a few superior physicians who have not felt the need of obtaining certification and who are leaders and teachers of junior men. New applicants, however, if not certified specialists or in line to become certified, will receive little consideration.

What then can we expect as this trend continues? Will we not, of necessity, witness a division between the hospital staff members, the team of techniques and tests, and the family doctors, the personal physician practitioners or, as we might say, between the sons of the science and the artists of the art of medicine? Will either group be considered as second-class doctors? If so, which? Neither, it is to be hoped. If physicians do become divided in this manner, as happened in England and in other countries, there is no reason, whatever, to accord the higher prestige to the hospital group, as has been the case elsewhere. A distinguished professor of medicine recently told me that in his judgment the most important function of the highly trained internist should be the diagnostic study of individuals in their homes or in his office referring them to the hospital for the technical procedures needed for further investigation and treatment. Such a study by the internist would of necessity involve the acquisition of a clear comprehension of the patient as a person, his fears, his worries and all phases of his personal problems. Such a physician could be a liaison person between hospital groups and family doctors. But these family doctors, themselves, will need a good general grasp of scientific medicine, especially in the matter of diagnosis, and their opportunity to know people and to help them should make their work most satisfying. On the other hand there will always be a necessity for the technical experts on hospital staffs to practice the art to some degree at least, dealing with their patients as *people* with fears, frustrations and forebodings.

High Degree of Understanding Needed

A high degree of humanity and understanding is needed by all physicians. Unfortunately one occasionally notes even now, when hospital work still is carried on principally by physicians in private practice, that ward rounds with a group can be very damaging, and thoughtless remarks can destroy the degree of confidence and morale that may have been most difficult for the patient to achieve. I have felt that at times it has been more harmful to a patient to say the wrong thing to him than to give him the wrong medication. One must deplore the "determinized attitude toward the patient" described by Doctor Sol Weiner of New York in an address in which he quotes a colleague as saying, "between the physician and the patient there has become interpolated a third entirely mechanical thing — the apparatus." Despite this intrusion there is certainly no reason why both the family and the hospital doctor should not practice *all* phases of medicine with the emphasis in the work of the family practitioner on the art, and of the hospital doctor on the science.

This division of function between hospital and family physician may not develop but at the present time it seems most likely. It might well result in an improvement in patient care in the hospital for it would leave the hospital staff members free to reach a very high degree of technical excellence in narrow fields, kidney disease, thyroid disorders, hematology, diabetes and the like, without making it necessary for them to spend their time in studying the broader fields of medicine, while the general internists and family doctors could be familiar with this work without spending their time on learning scientific details and techniques useful only in special fields in the hospital. Under these conditions the two groups could meet in conferences and case discussions at which each would learn enough of the work of the other to keep them both up with the general progress of medicine.

Although "organized medicine" in this country has stated that the American people receive the best medical care in the world, this is open to question. In many countries, England and Israel for example, the average citizen who is ill and is taken to the hospital is placed under the care of highly selected experts, while in America it is possible for him to be attended in many hospitals by a general practitioner who has hospital privileges and who, from a technical point of view, may be distinctly less able to cope with diagnostic and therapeutic problems than are his more highly trained colleagues. The division of the profession, then, which we have been discussing, might well result in more competent care of the hospitalized patient. Doctor Osler L. Peterson in his article titled *How Good is Government Medical Care?* puts it this way, "The Scot or the Norwegian who enters a hospital in his country can do so with the assurance that the surgeon or physician who cares for him is well trained and well selected for his post. The American who enters a hospital must depend upon his own imperfect judgment of a doctor's qualifications."

Development of Group Practice

The "solo practice" of medicine of a half a century ago is certainly out of the picture. The doctor cannot possibly be all things to all men. Group practice, formalized or more or less informal, has become a necessity even in small communities. Can the practitioner of the future continue to be a family physician and a hospital expert as well? Is the hand-

writing on the wall? Already, as we know, many hospitals are appointing full-time salaried chiefs of services. Is this a step toward relegating the attending physicians to roles in the hospitals which can be considered minor and likely to be more so as time goes on? This would be hard to deny.

In the field of academic medicine the trend is already firmly established. As in many other university departments, so in medicine, achievement in research in extremely specialized fields is required of those who aspire to top faculty appointments. In the field of internal medicine, for example, as Doctor David D. Rutstein points out, "Demonstrated competence in the basic sciences — particularly in one of the sub-specialties of biochemistry — is almost a prerequisite. Ability to manipulate the gene, the hemoglobin molecule, or an enzyme system is prized far above skill in management of a patient with a complicated disease. Those whose competence is limited to clinical research and teaching are likely to be passed over. A modern Sir William Osler, for instance, could not win appointment today as head of a department of medicine in an American medical school."* Our medical leaders are excellent scientists but often we must admit, they are mighty poor doctors and sometimes inadequate teachers as well.

In this situation Doctor Rutstein has made an interesting suggestion. He proposes that the "medical school set up two divergent courses of study, one for medical research workers and specialists, and another for the practicing family physician." Should this be done the division of medicine along the lines which I have indicated would certainly take place.

Progress and Retrogression

The advisability of such a division seems questionable. Even in the most highly specialized services in the best equipped university hospitals, the work of the scientifically competent but emotionally bungling professor *must* be tempered by the real compassion and understanding that marks the true physician, or his teaching is inferior. Treating human beings on a biochemical level only is a halfway measure that falls far short of good therapeutics. It seems clear that the present trend will have to be altered and a place for the *real doctor* will have to be maintained even in the Ivory Towers of the profession.

There is another phase of the work of the present-day physician which I wish to discuss. In the field of pharmacology and therapeutics we have seen the development of powerful and effective drugs of various sorts, insulin, sulfonamides, antibiotics, vitamins and hormonal preparations and others, that have revolutionized therapeutics. Wonderful success has been achieved in controlling many serious diseases as we are all well aware. "Wonder drugs" indeed! But as we also know every medicament capable of great good is, if improperly applied, also capable of great harm. For the development and perfection of many of these the great pharmaceutical industry deserves credit. From its research laboratories have come excellent new products which have been of the greatest value to humanity. Progress! Great progress indeed! Let us, however, not stop here but let us look at the other side of the coin. Competition and commercialism have dimmed its brightness. Expensive brochures and persuasive detail men have pushed the sales, and we see the crossroad's doctor employing the new drugs freely in treating his patients on the basis of sales propaganda in what is really a most reckless manner. This is far beyond what the experts in university departments where these very drugs are being studied would dare to attempt — the fools of practice rushing in where the angels of research must fear to tread. This is retrogression. Then too, there is the almost hopeless confusion of trade names and the fact that the A.M.A. council had, for a time, apparently abandoned its proper control of the situation. Retrogression again and reform urgently needed — and already measures of correction are under way.

Another example of progress and retrogression is seen in the educational programs of community hospitals. This is of great importance not only because hospitalization has become so generally necessary, but also because the non-university affiliated hospitals have so increased in number and capacity that they now admit over seventy-five per cent of people who are treated for acute medical or surgical conditions in hospitals in the United States. The increase in the number of approved programs established in community hospitals as a result of the demand created by the return of young physicians to private life at the end of World War II and the Korean War was definite evidence of progress. The *decrease in demand* for appointment in these programs on the part of American graduates that later occurred, when there was no longer a large group of those who had been in the armed services to deal with, and the *necessity* to fill the positions with graduates of foreign medical schools, many poorly trained, was retrogression. Progress is again evident in that in the past few years most of these community hospitals have greatly improved their programs. Many have appointed directors of medical education. Furthermore, the Educational Council for Foreign Medical Graduates now screens all physicians from medical schools outside the U.S.A., Canada and Puerto Rico. With the protection of the public and the hospitals that this

**Harper's Magazine*-Special Supplement. October 1950, p. 147

continued on next page

agency affords, we have a situation which will be favorable, providing enough foreign graduates to fill the needs of the community hospitals are available. As we all know there are more than four thousand approved internships in excess of the number of American graduates. While some of these are substandard and should be improved or eliminated, most of them are good. The maintenance of a house staff in a hospital with a good educational program means not only a service to these physicians in training and to the foreign countries to which they will return, but, what is more important, better work on the part of the staff members who are their teachers, for it is always the teacher who learns the most, and, *most important of all,* better care of the patient.

In this presentation on medical education and practice many important factors which affect the situation can be considered but briefly. The much discussed cost of hospital care, for example, is so significant, that it must indeed be mentioned although to deal adequately with this subject is beyond my competence and the time at my disposal. It seems clear that something must and will be done. Not only is the public showing great and understandable concern, but, as the "consumer" of medical services, it obviously intends to insist on more efficient planning and co-operation between physicians and hospitals, and sufficient public control of the situation so that its interests can be protected.

Duplication of Equipment and Services

One reason for excessive hospital costs is the duplication of expensive equipment and specialized services in several hospitals in one community, where such facilities in one of the hospitals would fill the need. We see this in Providence. What an opportunity for co-operative planning we have in Rhode Island! If the various special procedures, such as, for example, the expensive organization and equipment required to study patients who may need cardiac surgery and to carry out such surgery, could be confined to one or two hospitals, rather than having several of them competing with each other and interfering with the full development of competence on the part of any group, better work at less expense to the public would result. The same holds for work with the artificial kidney and a number of other highly technical procedures. An equitable assignment of the development and operation of such projects to hospitals ready and able to undertake them and an agreement of other hospitals not to duplicate these efforts but to develop others as their share in the medical work of the state would be a wonderful achievement and a model for the whole country. Control of such division of labor would have to be through co-operative planning by the hospitals as a group. Political or government control would be worse than none, but could be forced on us if we make no effort of our own. I'm afraid a medical millennium, even in Rhode Island, is a long way off.

As a matter of fact this duplication of specialized and expensive procedures is but a minor factor in raising the cost of hospitalization. More important is the cost of the equipment that is now necessary for the accurate diagnosis and effective treatment of disease and the necessary co-operation of many experts. There is, however, a favorable aspect to the situation — the treatment of disease is much more effective than formerly, more patients get well and most of them are returned to their homes much sooner than used to be the case.

However, the cost of being ill and hospitalized is very high and has made necessary prepaid insurance. We know that many powerful groups are taking this matter very seriously. Not only the voluntary Blue Cross and Blue Shield and other forms of prepayment for care by *independent* physicians, but various organizations for the furnishing of medical care by *full-time* doctors such as the chain of hospitals operated by the United Mine Workers, the Health Insurance Plan of Greater New York (H.I.P.) and others, are in operation. This may be only a beginning.

Should it become evident that the public is going to demand general compulsory insurance by government, despite all its well-recognized disadvantages, it will also be true that if the medical profession wishes to have any part in planning it must be willing to co-operate. A desperate last ditch struggle, an uncompromising opposition to change, can only result in a complete loss of any chance to have a hand in shaping the future of medical practice. Let us not forget the results in England where the general practitioners presented bitter and complete opposition to the establishment of the National Health Service and have been most unfavorably situated ever since. The forces that will demand changes are powerful and their demands are not entirely without reason. If the changes that appear inevitable can occur by evolution and if the medical profession can give co-operation and guidance rather than presenting a front of bitter and unyielding opposition the end result will not be bad. It is true that the doctor's freedom of action may be somewhat curtailed but the patient, even though his choice of physician may not be entirely free, will in many instances be better served.

There is one rather dark cloud on the horizon. The number of top-grade students entering medical school is diminishing. With the changes that are coming, the possibility of some government control, the high cost of medical education and with the rash of public criticism of doctors and hospitals that has

recently been fashionable, it appears probable that it may be difficult to attract the best of our youth into the profession. At this point, if I may again take a long look backward, I can assert that in my judgment this criticism of the medical profession comes at a time when medical practice is carried out on the highest ethical plane in history. To students the attractions of engineering in its various divisions with its promise of relatively prompt advancement to higher income status is probably a potent factor at present, but this situation cannot last as the engineering ranks will in time be filled. Furthermore, plans are being made to give scholarships and loans to medical students which should be very helpful. The present situation must be a temporary one for human beings and their basic health needs do not change. The demand will eventually result in an equivalent supply of those young people whose abilities and ideals lead them to undertake the physical and mental care of their fellow men and the soul satisfying scientific studies of their ailments.

What Lies Ahead?

And now, as we have viewed the present scene with both a backward look at the conditions from which it has developed and an occasional attempt to obtain a glimpse of the future, let us briefly review the highlights of what we have discussed with special emphasis on our guesses as to what lies ahead. First, and perhaps most important, what can we say of the practice of medicine both within and outside of our hospitals? That a change is taking place is clear. Detailed and specialized knowledge and techniques mean hospital personnel with more competence in narrowly specialized skills. The establishment of more and more full-time staff members who must give their whole attention to the study of hospitalized patients, except for such outside consultations as their individual skills make appropriate, is already taking place. I anticipate that this trend will continue and the cleavage between the hospital technical experts and the practitioners outside the hospital will gradually become more definite and complete. From the point of view of keeping the whole profession well in touch with the progress of medicine this trend will have to be controlled and a means found to keep all physicians who are in private practice fully conversant with medical advances, or we will have a definite retrogression in the quality of patient care in our communities. The family physician must be kept from becoming a second-class doctor, as has occurred elsewhere in the world.

In this matter of continued postgraduate education I anticipate further development of the work of the Academy of General Practice and perhaps even certification in this field as a recognized specialty. In the specialties now recognized, board certification will doubtless be continued, but with the establishment of more and more full-time hospital positions for physicians there may be places for fewer specialists and the boards may need to certify fewer. The length of training for the specialties will not be reduced, but one must remember that the physician who is putting in years of work in approved residencies is not training for his life work, but *doing* it.

Among other matters which we have considered, the deluge of new drugs presented to the bewildered practitioner with confusing trade names and often with misleading sales propaganda presents a situation which must, and I believe will, be corrected. The use of well-chosen generic names which should be insisted upon in hospitals and more complete and careful control by medical authorities is, I trust, on the way. One cannot believe that the great pharmaceutical industry which has done so much for the health of the public can do otherwise than co-operate.

Another subject of paramount importance that we have mentioned is the development of the educational programs of community hospitals. Despite the set-back that some have received as the result of the diminished numbers of available foreign graduates, I am of the opinion that these hospital programs will develop and improve and that the hospitals will become more and more completely the educational centers for the profession in their areas. I believe that the diminution in the supply of physicians applying for training in their house staffs will be temporary and that the benefits to these interns and residents, to the attending staffs and to the public will be increased. For many years, I anticipate, physicians from abroad will desire American clinical education. With the protection of the public that is the main function of the Educational Council for Foreign Medical Graduates, I anticipate better days ahead in this most important segment of American medicine. Hopefully foreign exchanges will eventually become two-way in type and American graduates will be accepted at hospitals in Britain, on the European continent and elsewhere. With the development of a stable world situation, for which the whole world longs, this could take place.

As to the effect of the rising cost of medical and hospital care, made inevitable by the development of expensive techniques and equipment and public recognition of the need for prepaid medical insurance, one cannot escape the opinion that outside controls, even by government, may be forced on the profession. Should this situation arise, to salvage what is best of our system as we have known it and to have a hand in shaping what is to come we must, as the pugilists put it, "roll with the punch," accept-

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Presidential Address . .

THE THIRD PARTY IN MEDICINE*

EARL J. MARA, M.D.

The Author. *Earl J. Mara, M.D., of Pawtucket, Rhode Island, President, 1960-61, the Rhode Island Medical Society.*

THANK GOD that we in America still have the right of free speech and that "organized medicine" has never tried to limit the right of expression of opinion by any of its members.

We heard the opinion of an outstanding learned physician expressed here last night, and this morning we were once again given evidence of a biased press when it gave headline prominence to the particular statements that suit its fancy, and once again taken out of context.

I would like to remind you that on November 7, 1937, the NEW YORK TIMES published a list of 430 doctors who had "courage to rebel against organized medicine." It stated that these 430 doctors had made a medical declaration of independence. The principles and proposals of the Committee of 430 called for the recognition by the medical profession of the principle that "the health of the people is a direct concern of the government," and that a "national health policy directed toward all groups of the population should be formulated."

This declaration sounds familiar to all of us, young and old, and we are well aware of the fact that our honored speaker of last evening was one of two Rhode Island doctors listed in the NEW YORK TIMES as a signer of the so-called "medical declaration of independence."

At the time of the NEW YORK TIMES release rebuttal by medical societies was prompt and forthright. In a news item in the PAWTUCKET TIMES in the following week a statement was made by Doctors Charles Farrell, Robert T. Henry and Earl J. Mara referring to Doctor Burgess's reversal in his previously published statements regarding "socialized medicine."

Quoting from the PAWTUCKET TIMES, "The three Doctors pointed out that in the RHODE ISLAND MEDICAL JOURNAL of January 1937, in an article titled 'Progress in Private Practice — Is Socialization Needed?' by Doctor Alex M. Burgess, appear the following:

(I quote in part.)

"If then the work of the physician today under the system of independent private practice is not on the average so poor, if in fact he is doing increasingly better and more scientific work as the years go by, fulfilling, as he must, higher and higher technical requirements to be admitted to practice, and preserving as he does, the lofty ideals that are his heritage, one can hardly say that the profession of medicine is in a state of 'decline.'

* * *

"Anything which limits the free choice of his physician by the patient will be a step backwards, and anything which takes away from the physician the necessity of 'making good' in the eyes of his patient and of giving him his level best of attention and kindness as well as of technical skill, will be retrogression indeed.

* * *

"Let us mention only in passing the possibilities of gross injustice that are ever present under any sort of bureaucratic control and in this connection let us quote the words of another Englishman, the present Lord Chief Justice; 'The Treatment of the panel doctors under the national health insurance Acts is pure despotism.'

* * *

". . . in view of the fact that in no group of independent individuals in our modern civilization is the profit motive less prominent and the need of socialization less urgent than it is in the medical profession."

The above quotes are intended to look in retrospect at the opinion expressed by Doctor Burgess in our own Medical Journal in 1937. The press did not give headlines to these comments of our honored speaker of last evening, at the time of their utterance.

It proved once again, to my mind, the doctor must be properly informed through the publications of his own society, and it further proves that "organized medicine" does not "gag" its members, but gives one and all an opportunity of expression.

*Presidential Address delivered at the 150th Annual Meeting of the Rhode Island Medical Society, at the Medical Library, Providence, Rhode Island, May 3, 1961.

However, it does reserve the right of rebuttal by its duly elected officers to speak for the majority of its members.

The Doctor and His Medical Society

The practice of medicine has proceeded a long way from the time of Hippocrates, and medical services are becoming more complex day by day.

The impression has been created too often, that a small group of administrators at the Chicago headquarters of the American Medical Association dictate in some magical way all of the policies that govern the entire practice of medicine. Too often, the news media of our nation categorizes the A.M.A. as something distinct and apart from the doctor in the various county and state groups.

Why do we allow this impression to continue and grow? We know that our local county medical association controls the practice in its community and governs the activities in its respective area for ethical medical service and progressive public health measures. I know that I applied for membership in my local medical society, and I considered it a great honor to be acceptable for membership. The certification of active membership in his district medical society is all the doctor needs to submit to join the state medical society, and notification of membership in good standing in the local and state organizations is all a doctor needs to be eligible for membership in the American Medical Association.

We know the process of organization, but we individually have not clearly told our story to our patients, to our friends, and to interested parties everywhere. Such a positive plan should be and must be arranged to clarify the misinformation.

Using the words "organized medicine" the cry from socialistic forces are heard on many fronts. They flood the news media available to the public with "venom" about "organized medicine." These groups have repeatedly indicated that the A.M.A. is an association or organization for doctors, but presumably not by doctors.

Recently I received a copy of the Oil, Chemical and Atomic Union News, and one-half the paper is devoted to discrediting the American Medical Association. Such captions as "How the A.M.A. Cracks the Whip on Your Doctor," "A.M.A. Old-Timers Starve Out Doctors Who Don't Play Ball" and "Committee Rigging by Old-Timers" are used.

Statements oftentimes attributed to "organized medicine," frequently come from the arm of medicine engaged in teaching, research, and administration. These brethren are often too far removed from the actual practice of medicine to issue authoritative opinion as to the policies of the practicing arm of medicine. However, working together and with the help of God, these arms of "organized medicine" have increased the life span of man twenty-two years since 1900.

In light of these facts we are obliged to review the efficiency of our own Medical Society. Our Medical Society is as good and as effective as we individually make it through our personal and individual communication with the public. We work collectively through the various Committees of the Rhode Island Medical Society to augment the efforts of the individual physician. The doctors of Rhode Island, through the Rhode Island Medical Society, have repeatedly demonstrated in increasing ways how vital a factor in community life our organization is.

It is true that many of our members, unfortunately, have not fully sensed the importance of service through the various committees of the Society. But to those many doctors who have given of their counsel, energy, and time throughout the years we are indeed indebted. I wish to commend, particularly, those devoted and dedicated physicians who have carried forward active programs during the past twelve months. It is by and through their efforts that the Rhode Island Medical Society becomes a "living organization," that gives far more to the welfare of the citizens of this state than any comparable group.

By way of example, consider the work of our child-school health committee which has met often to study and review school programs, to set up standards for health examinations of schoolchildren, and which has encouraged the adoption of sound practices by our various school districts. Or perhaps consider the public service of the diabetes committee with its Diabetic Fair and free testing programs for the dissemination of authoritative information regarding that illness.

The list of working committees is a long one, and the work accomplished has a tremendous impact upon the good health of the citizens of Rhode Island. No medals or awards are sought or desired by these committees, but it certainly redounds to the credit of the physician and to "organized medicine" as represented by the district and state medical societies with which they are affiliated.

To enumerate additional committee services and studies:

1. Problems of safety in industrial plants and protection of the interests of the worker injured on the job.
2. Consideration of vital decisions for the care and protection of those afflicted with mental illness.
3. Study and review both perinatal mortality and maternal health, which has resulted in the lowest maternal mortality rate in the nation for Rhode Island.
4. Support of effective highway safety controls and chemical tests to halt the drunken driver.

continued on next page

5. Close observation and quick protestation where legislation is proposed that is inimical to the interest of the public.
6. Evaluation of the public assistance programs to aid the welfare recipient, and contribute so that he shall get the finest medical care available in our state. The dollar value contributions by the doctors of Rhode Island to the Welfare Program is a matter of public record.
7. Constant study of problems of medical care for the older-age citizen.
8. Development of standards for blood bank programs in our hospitals.
9. Preparation for adequate medical coverage in the event of community disaster.
10. Close alliance with all agencies in the health and welfare field.

These and many more are included in the activities of your Rhode Island Medical Society.

In addition to the afore-mentioned programs, the Rhode Island Medical Society, after tremendous studies and preparations, offered the people of Rhode Island a voluntary prepayment medical and surgical plan, known as "Rhode Island Medical Society Physicians' Service Corporation." From the day of its founding, devoted physicians gave, and are still giving of their time to give the best plan available in the voluntary prepayment field to the citizens of the state. At its outset the fee schedule was arranged and arrived at after considerable studying, and by concession on the part of participating physicians, which permitted service benefits for many people at a fee below the average fee charged for these services at that time.

The Rhode Island Medical Society Physicians Service has developed and expanded through the years and is second to none in this country. The success has been greatly due to participation of practically the entire membership and to the review of cases by an active Claims Committee. No other plan has, or in my opinion, will ever be able to offer service benefits to so many citizens of Rhode Island.

We must not, and shall not, stand on our record, however, but proceed to improve our plans for the common betterment of all citizens of Rhode Island.

All the programs that I have mentioned are possible because in this state, organized 149 years ago, on the premise that the medical art is important to the health and happiness of society, and through the years our predecessors and we have dedicated ourselves to the healing arts for the benefit of all citizens and not a favored few.

Intrusion of Third Party

All of these accomplishments have not been made without an increasing measure of interference and "heckling." A "third party" is involved in over 90% of physicians' services today.

Prior to World War II there was an occasional third party representation by private insurance carriers, but with the New Deal Era and with the advent of World War II, the impact of the third party on the physician-patient relationship soared to an ever-increasing high.

During World War II, wages were frozen, and fringe benefits came into being. The insurance industry, particularly voluntary prepayment plans, got a "shot in the arm," with labor seeking, and management agreeing to pay for medical and surgical care.

At the same time medicine was having its "face lifted" with the changing of the ratio of specialists to general practitioners, as the result of a liberal GI bill permitting postgraduate education.

Related services spurred on by the war effort produced and perfected many new therapeutic measures and operative techniques.

With this explosion of knowledge in science came a newer approach to the healing of the sick. The third party must be met on many fronts, in hospital administration, in office records, and in billing patients for services rendered. However, in spite of the increased pace and interruption, nowhere along the line did the doctor of medicine forget the heritage of his predecessor, who worked with such limited resources; rather, he has continued to comfort the afflicted, restore faith, hope, and health, and ease the mental anguish of patients' families. He has added, and continues to add, all the newer diagnostic and therapeutic measures to his armamentarium.

The interest of the third party has all but destroyed the privileged communication of patient and physician. Government agencies, OASI, VA, Welfare and Disability Compensation, insurance companies (private and voluntary) and union health and welfare programs require limited information to process claims. However, too often, personnel handling this information do not respect its confidential nature in the best interest of a patient.

Washington has continued to offer services to the public and judging from the bills already offered in Congress, this year will be no exception. Some of the services that are granted by Washington are not needed by, or demanded by the public. These give-away programs too often tend to destroy one of the finest character building mechanisms within the soul of man. They destroy initiative of many individuals who are our best workers and producers. Increasing tax structures have destroyed or are destroying man's desire to contribute to his neighbor in time of need. How often we hear, "let the government support the hospitals and clinics, and research in cancer, aging, heart disease, etc., . . . I pay enough in taxes."

In the relationship of man, everywhere in the world, where there has been regimentation the medical profession was regimented first. Doctors are too busy and dedicated to their duties to prevent regulation. It is my opinion that the third party will remain in the practice of medicine, but let it be the third party of common consent of physician and patient. Let it be the voluntary system and not the regimented type.

We, as a profession, must accept the stewardship of responsibility of total care or allow someone else to do it for us. It is not sufficient to cry No! No! No! A positive plan must be developed and offered within the framework of the voluntary system.

Finally, we must agree that it is not morally correct for society to neglect those in need. However, it has been suggested that the moral action of individuals be replaced by "collective morality." How can action be moral if it is induced by compulsion? I prefer to believe that the individual who, after being apprised of those in need, seeks to remedy the situation, insofar as possible, by loosening his own purse strings, is thinking and reacting favorably to a moral issue. Contrariwise, one who thinks only in terms of legislation to force everyone to take care of a problem, is reacting unfavorably to the same moral issue.

I would like to remind proponents of the regimented policies that from the time of Hippocrates one of the finest traditions of "organized medicine" has been to give medical care to those unable to pay. If proponents of government medicine are successful they surely must realize that this tradition will be destroyed and that the cost of this care will become the responsibility of the taxpayer.

Leadership must be fearless and support must be loyal in any plan of rebuttal. We must have positive thinking, develop a proper perspective and disperse factual information to afford us a proper sense of direction. The alternative is that we become bogged down in the "quagmire of rumors" that spawn fear and deplete courage. I would remind you that a winner never quits, and that a quitter never wins.

In conclusion, I would remind you that the term "organized medicine" is an honorable characterization here; for by your efforts as members of the ninth oldest state medical organization in this country we have completed a record of which you may be proud.

I commend you for your support and remind you that only in unity is there strength. All plans of regimentation will fall short of success if we stand united. We must push apathy and defeatism aside, and not consider these legislative programs as the beginning of the end, but rather the end of the beginning.

LESSONS
from the
HISTORY OF MEDICAL DELUSIONS

The lessons which are taught by the history of past delusions are slowly learned by the medical profession, and still more slowly by the community at large. In the progress of human knowledge medicine has not been disencumbered of error so rapidly as the other sciences have been. So little does it bear the character of an exact science, especially in its Therapeutics, and so prone are men to conjecture and theorize where they cannot know, that the errors of the past on this subject have very generally failed to guard effectually against errors in the future. The history of medicine, therefore, presents to our view a succession of errors, standing out in bold prominence; each one having, as it rose to its ascendency, supplanted some favorite error which preceded it. Truth, however, let it be remembered, has been all the time more and more developed, by a constant accession to the facts and established principles of our science. And these facts and principles remain as permanent acquisitions, the property of the profession through all time; while its array of baseless but splendid theories and doctrines has passed away, like a succession of dazzling but useless phantasmagoria.

* * *

It is observation, minute, accurate, comprehensive, unbiased by theory, which, proving all things and holding fast that which is good, can rid the medical profession, and through them the community, of the errors and delusions that have prevailed in such diversified forms from the infancy of medicine to the present time. And this is a deliverance which I believe is not only possible, but, if the profession as a body prove faithful to the high trusts reposed in it, is near at hand. I do not believe that the errors of the past must be perpetuated. I do not believe that we need to go on forever confounding the effects of remedies with those of other agencies. I do not believe that it is necessary that the searcher after truth in our science should labor under the incumbrance of theory, or that he should divide his energies between profitless and ingenious theorizing, and the legitimate labor of science, observation. I do not believe, that, in order to develop truth, the mind must at the outset be dazzled by extremes and exclusive views of it — that a leap must be made beyond it over into the region of error, rendering it necessary to retrace some steps to see the truth exactly as it is. I do not believe, that, in order to make observation distinct and clear, it must be shut up wholly, or in part, to any one mode or means. These and other sources of error may be abandoned; and the wide domains of medical science may, even in our day, be secured under the rule of a pure, exact, rational and comprehensive OBSERVATION.

... From the 1850 Fiske Fund Prize Dissertation of the Rhode Island Medical Society, by WORTHINGTON HOOKER, M.D., of Norwich, Connecticut. Baker & Scribner, New York, 1850.

KENNEY CLINIC DAY

Wednesday, October 25, 1961

Pawtucket Memorial Hospital

MEDICAL CRISIS OF THE SIXTIES*

E. VINCENT ASKEY, M.D.

The Author, *E. Vincent Askey, M.D., of Los Angeles, California, President, the American Medical Association.*

MY SUBJECT TODAY is not a light one. The medical profession — indeed, the entire structure of our free society — is in grave danger both from within the country and from without.

Nuclear war threatens, anarchy reigns in Cuba and the Congo, tyranny is constantly trying to crush liberty. Throughout the world we can see the conditions which created Hitler and Mussolini starting all over again. Social disorder and chaos are ripe fertilizer for the swift growth of dictatorship and despotism.

And from within there are dangerous forces acting to undermine our freedom and our rights to live as unfettered individuals.

The international unrest is reflected in renewed efforts by those Americans who believe in an all-powerful central government, one which regulates and controls the lives of all its citizens from the cradle to the grave.

Perhaps those of us in the medical profession are more sensitively aware of this increased threat to our freedoms because we have been selected as a primary target for governmental control.

Perhaps because ours is a dignified, nonpolitical, individualistic profession, we are susceptible to the attacks of those who would achieve their goals by emotional, irrational appeals to the voters.

Gentlemen, I will not beat around the bush or deliver a philosophical discourse.

Rather I want to call you to arms in a war that has two fronts. We must continue to battle for preservation of our medical freedoms against the inroads of governmental intrusion, while at the same time we must strengthen our assault to provide the finest medical care for all our people.

Kerr-Mills Bill

Our battles today involve our defeating attempts to place medical care for the elderly under social security. Also, we must intensify our efforts to implement the Kerr-Mills law — which provides help for those who really need help, the needy and near-needy aged. We must see that the Kerr-Mills law is given a fair chance to prove its exceptional worth in the health care system.

The Kerr-Mills law is one which we fought successfully for, and one which provides the right answer to the problems of health care for the needy aged.

We won a tremendous victory when the last Congress rejected the social security approach and instead passed the Kerr-Mills legislation. It was immediately signed into law by President Eisenhower, and the states started to work implementing it.

Because this law is the embodiment of our beliefs, we must now labor to make it work. Our efforts are essential to the success of this law, especially since the administration has shown no enthusiasm for supporting and promoting implementation of this system of state-federal matching funds.

Just to give you a brief rundown, our latest figures show that the Kerr-Mills program is enjoying phenomenal success in the individual states. Even at this moment some of my statistics may be out of date, for the states are moving at an unprecedented speed to enact suitable legislation.

Right now:

— Eight states and two territories already have the Kerr-Mills program in effect:

— Eight more states have enacted legislation;

— Fourteen states have introduced legislation, and

— Two states have drafted measures to implement the program.

In my opinion, this is remarkable progress, considering the fact that the law is only six months old.

I should also add that the Kerr-Mills program is under consideration in seven states and the District of Columbia. Several other state legislatures will be convening in the coming months, and it is expected that they too will ratify this splendid law.

I believe that it would be tragic to shoulder the wage earners of this country with an additional tax in the form of increased social security deductions before the Kerr-Mills law has been given a chance to prove that it can do the job. This is a plan that

*An address delivered at the dinner session of the 150th Annual Meeting of the Rhode Island Medical Society, at the Sheraton-Biltmore Hotel, Providence, Rhode Island, May 3, 1961.

enables the individual states to guarantee to every aged American who needs help the health care he requires.

The supporters of the social security approach have been deliberately misleading the public so that people will think social security is some sort of insurance system, whereas in reality it is nothing more than a compulsory tax which provides dubious returns to the taxpayer.

The Administration's King Bill

Advocates of the administration's King bill — which embodies the social security approach — say it is "a health care plan for the aged." It is no such thing.

The bill would only provide hospitalization and nursing home care for some old people — those covered by social security. Remember, those who need help the most are those who are *not* covered by social security. These millions of poor and destitute are denied even the limited services provided by the King bill.

Another misleading statement is that the King bill is "a program of prepayment of insurance for future benefits," or "a life policy of paid-up insurance."

Once again, these claims are false and deluding. The Supreme Court has ruled that social security is not insurance and that payments to it are *taxes* — not premiums or contributions.

Remember, the social security system is merely a redistributive tax plan which forces today's wage earners and their employers to foot the bill for payment of benefits to yesterday's workers who today are retired.

Even the social security administration admits that the security of the plan ultimately rests in the taxing power of the federal government and the willingness of the people to pay the taxes.

I don't know how much longer the American people will allow their earnings to be gobbled up by the voracious federal appetite, but once they finally decide they have had enough, the social security system may go out the window, along with the so-called "earned rights" and "insurance" income of all the recipients.

Social security is not insurance; it is a tax. There is no "earned right" to benefits because Congress can scrap the entire system at its whim.

I am not talking as a social security expert. The A.M.A. has never taken an official position on social security, for or against. Our only concern is the threat of Congress adding medical and health benefits to the present system.

Those pushing the King bill are exploiting not only the wage earners of this country but the wage earner's children as well. To operate the King bill under social security would create a permanent debt on which tomorrow's workers and their employers would have to pay interest for the rest of their working days.

I also question the claim made by social security enthusiasts that the King bill guarantees "free choice of physician, hospital and nursing home." As you know, it has been said that "providers of service would be paid on the basis of *reasonable cost* as may be mutually agreed to by the provider of the service and the Secretary of Health, Education and Welfare."

I would like to know what happens when the H.E.W. secretary fails to reach a satisfactory agreement with a hospital or nursing home to which the individual wants to go — does the patient still have free choice? To imply this is to mislead the public.

Also, contrary to its proponents' claims, the King bill will very definitely include physicians' services, since hospital services usually include those of anesthesiologists, radiologists and pathologists.

Also, virtually every hospital requires physician certification before a patient is admitted, therefore, every doctor with a patient in a hospital will be affected by this legislation.

All this uproar over the King bill is really unnecessary, for the Kerr-Mills law will do the job . . . and do it better than any social security proposal.

The Kerr-Mills law has the attractive advantage of being voluntary — not compulsory. It is administered by the states — not the federal government. Each state legislature can determine the needs of its citizens — rather than having the federal government establish one rigid, inflexible standard for all.

Since the King bill is unnecessary and unlikely to be covered by proposed tax increases, it can only be classified as another government spending program which is bound to result in more inflation.

If there is one thing our elderly do not need, it is more inflation. Any aged person who retired a few years ago, thinking that his pension was enough for his needs, knows the bitter cruelty of inflation. This situation will only worsen if the federal government insists on spending our tax money for more unnecessary schemes.

Critics and Opponents

As you know, we have come in for considerable criticism for our opposition to the social security approach. Personally, I don't mind this criticism, since it is part of the price we must pay for our medical leadership. However, I know it bothers many physicians, especially that criticism which is politically inspired and based on emotionalism rather than reason.

We must separate our critics and opponents into two groups; the first is composed of those who disagree with us on ideological philosophy; the second includes those who find A.M.A. a convenient whip-

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ping boy and a steppingstone for their political ambitions.

The first group is one whose opinions we must respect, even though we disagree violently. Every man has a right to his opinion and his belief, and we would be the last ones to deny him the right to hold opinions which do not agree with ours.

"I disagree with what you say," Voltaire said, "but I will defend to the death your right to say it."

This, of course, is our attitude toward those who sincerely believe that the social security system is the ideal mechanism for providing medical care for the aged.

But the other group — those who are fighting us merely for political expediency . . . those who are more interested in the votes of the elderly than in helping them . . . those who have concentrated their venom on the A.M.A. with slander, half-truths and distortions — with this group I have no patience.

I don't mind being criticized or opposed, but I do object to being deliberately maligned just because I disagree with someone.

The medical profession has been profoundly shocked by a member of the Kennedy administration who has made a number of false and misleading statements about the nation's physicians. The H.E.W. secretary, Mr. Ribicoff, has made such remarks publicly on several occasions.

Mr. Ribicoff has accused our association of trying to "frighten" the American people by calling the King bill socialized medicine. He also says we employ "sanctions" against any doctors who do not toe the line and agree with us completely.

This second charge is, of course, ridiculous and does not deserve an answer. All I can say is that in my many years as a physician and active member of A.M.A., I have never seen or heard of any "sanctions" such as Mr. Ribicoff refers to.

On the other matter, the A.M.A. is not trying to frighten anyone. We are simply discharging our responsibilities to the American people by pointing out our fears concerning the King bill.

If Mr. Ribicoff wants to attach political interpretation to our efforts, that is his own business. However, we think it is high time that a man of Mr. Ribicoff's stature — who occupies a position of enormous public trust — begins to be truthful with Americans and should stop trying to camouflage medical care for the elderly behind political sloganeering.

It is doubly distressing that a member of the President's cabinet would attack America's physicians with false and misleading statements while lobbying for his pet bill.

The first time Mr. Ribicoff attacked us, we thought he was either uninformed or badly misinformed. But his continued attacks convince us that he is deliberately trying to impugn and discredit the motive and integrity of America's physicians.

Therefore, our association called Mr. Ribicoff to a public debate to set the facts before the public.

I might add to my remarks about Mr. Ribicoff's reference to sanctions, that a year ago, at least two physician-members of the A.M.A. testified in favor of the Forand bill before the House Ways and Means Committee.

No sanctions have been imposed on them.

Nor will any ever be.

The Congressional Record shows that the physicians were asked if they expected any punitive action by the A.M.A. for expressing their views, and they replied that *they did not.*

Gentlemen, whether we like it or not, each physician must be prepared and willing to get into the fight to preserve our medical freedoms. We must intensify our efforts on behalf of the aged as well as all Americans.

Because of our intense fight, we must expect renewed criticism. As I have mentioned, this is just part of the price we must pay for our leadership. But I certainly think this price is worth the enormous benefits to the health care of our people.

THE CHANGING SCENE IN MEDICAL EDUCATION AND PRACTICE

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ing the changes that are inevitable and making the best adjustment that we can, with the idea that the good of the *public* comes first, that of the *doctors* second.

These are my ideas and my predictions, guesses that may be as good as those of any of us but no better. In concluding I cannot refrain from repeating the famous final remark of Doctor Fuller Albright in his John Phillips Memorial Lecture on Osteoporosis —"Ladies and Gentlemen," said he, "I have told you more about osteoporosis" (and in my case more about the past, present and future of American medicine) "than I know."

DID YOU KNOW?

- **That health insurance benefit payments by insurance companies during 1960 amounted to more than $3.1 billion, eight per cent more than the $2.9 billion paid out in 1959.**
- **That these health benefits averaged out to $8.6 million a day, an increase of more than $600,000 a day over the 1959 average.**
- **That 1960 benefits were higher for all five types of health insurance — hospital expense, surgical expense, regular medical expense, major medical expense, and loss of income.**

PATRONIZE JOURNAL ADVERTISERS

TRENDS IN FEDERAL AID TO MEDICAL EDUCATION*

HONORABLE JOHN E. FOGARTY, M.C.

The Author. *Honorable John E. Fogarty, Member of Congress from the Second Rhode Island Congressional District.*

ONE OF MY MAJOR INTERESTS and the focus of much of my activity during the twenty years I have represented Rhode Island in the Congress of the United States has been the health of our state and our nation. Over the years, as chairman or as a member of the subcommittee which has responsibility for, among other things, the annual appropriations of the Public Health Service, I have helped in bringing about a tremendous increase in federal funds available for the support of public health measures, medical and biological research, hospital construction, construction and equipment of research facilities, and the training of research scientists through the provision of research fellowships and traineeships, among other widespread activities and programs.

Although much has been accomplished, much remains to be done to advance our attack upon the diseases and disorders which still afflict our people. Over the past twenty years, and especially during the past ten, largely through the National Institutes of Health, we have built up a great and effective medical research attack upon the chronic diseases which has been remarkably successful.

In that same period we have also helped construct many modern hospitals and research facilities. However, there is one area in which there are inadequacies today and threatened inadequacies of alarmingly increased proportions in the future.

There is serious concern on the part of medical educators concerning recent trends. They report that both the quality and quantity of applicants for admission to medical schools in the United States have been falling off. You and others like you throughout the country can help to remedy this situation. Never before in the history of man have there been greater challenges or more opportunities for achievement than now exist in the fields of medical practice and medical research. As one of you, I personally challenge you to carry on, each of you, through all of the hurdles which yet remain before you, to attain individual levels of professional competency which will enable you to participate actively, to contribute significantly, to achieve with distinction in a field of human endeavor unmatched in the opportunities it offers for worthwhile and rewarding accomplishment.

What are the needs today, and tomorrow, in the field of medical practice? The fact is that we do not have enough physicians today, and the chances are that we may not have enough tomorrow. Looking forward to future needs, a special group of consultants on medical education, the Bane Committee, after a thorough study, reported late in 1959 to the surgeon general of the U.S. Public Health Service that we will need a 50 per cent increase in the number of graduating physicians if we are to maintain the present ratio of physicians to population.

This group of eminent medical advisers, including Father Robert J. Slavin, president of Providence College, stated in its report that the number of physicians graduated annually by schools of medicine and osteopathy must be increased from the present 7,400 a year to some 11,000 by 1975 — an increase of 3,600 graduates each year.

The Bane Committee also reported that this 50 per cent increase in the output of physicians will require expansion of present medical schools and the establishment of *new* ones. It also pointed out:

1. That since it takes about eleven years to plan a new school, construct it, staff it, and carry it forward to its first graduating class, steps would have to be taken immediately if the threatened shortage is to be averted.

2. That, as one partial answer to this problem, federal support should be given to the construction of medical school facilities.

3. That by medical school facilities which should be aided it meant the expansion and improvement of existing medical schools, construction of new facilities for teaching basic medical sciences, construction of new four-year medical schools, and the construction of necessary teaching hospitals.

4. That the provision of the needed support was without question a national responsibility.

I have long espoused in the Congress measures to meet these needs, and some progress has been

continued on next page

*Read before the Rhode Island Chapter, Alpha Epsilon Delta, of Providence College, at its annual dinner held in Providence, Rhode Island, April 16, 1961.

made. However, with our new administration now dynamically in the picture, I hope I can promise you some real action. However, before I go into this I want to pick up one other item pointed out by the Bane Committee: that nine states have no medical schools. Now, you and I know that Rhode Island has no medical school. I regret the fact that all of you young people will have to leave Rhode Island to pursue your medical educations. I am sure you believe that Rhode Island ought to have a medical school. I know that I do. More than two years ago I published an observation in the CONGRESSIONAL RECORD to the effect that the time had come for our state to have one, and expressed my wish to see such a school established.

I should now like to re-emphasize my faith in Rhode Island as a progressive state and to say that I know we *can* have a medical school here. I do not know how, when, or where. There are many problems, only one of which is financing. Along those lines I promise that I shall continue to exert every effort to reinforce the positive steps taken here in our community.

Like all science, medicine is based upon a constantly increasing fund of basic knowledge about human disease and how biological organisms function normally, and under varying kinds of stress. Therefore a vigorous, vital national program of medical and biological research is a prerequisite to the maintenance of high standards of medical practice. This has been accomplished by means of research project grants to nonfederal medical research institutions throughout the country, through programs which provide funds for the construction of laboratory research facilities, and with research training grants, all administered by the National Institute of Health.

However, this program, by its very success, may have helped create, and certainly has brought to light, problems and needs in the field of medical education and related areas of higher education. These problems have been under intensive study for some time by my committee in the House and its counterpart in the Senate, headed by my distinguished colleague, Senator Lister Hill of Alabama. Our committees, along with a large number of scientists, educators, and administrators, have come to the conclusion that the federal government must do more than simply continue to support more research projects, build more research facilities, and train more research people. We must think not only in terms of the end product we seek — better health for the people of this country — but also in terms of the institutions and the people who compose these institutions that carry on the bulk of the nation's medical research and teaching. Otherwise, the strength of those institutions we support might decline rather than improve.

There are three new programs under way or proposed which are designed to strengthen educational and research institutions and aid the individuals involved, including students.

Institutional Research Grants

The first of these is the recent authorization by Congress of a program of Institutional Research Grants to be administered by the National Institutes of Health. Under this program funds would be provided to public and nonprofit educational or research institutions to assist in the development and maintenance of sound, well-balanced programs of general research and research training in medical, dental, public health, and related areas.

This authorization was made in an effort to help solve the problems generated by the phenomenal growth of research activity in medicine and biology in recent years — problems related to internal administrative responsibilities for a rapidly proliferating number of individual research projects supported by NIH in these institutions.

A large part of that growth has been due to federal grants. Therefore our Committee felt that if clear evidence could be presented concerning real difficulties in our research institutions, corrective action in the federal granting programs would be justified.

I am frank to admit that so far as I am concerned, rather convincing evidence was recently presented by witnesses before our Committee. When that evidence, together with the details of how NIH proposes to administer the program are presented to the Congress, I hope it will win approval.

The Institutional Research Grants would provide funds to universities and medical schools, along with authority to use these funds, as needed, to finance various aspects of their research and training programs in accordance with their over-all objectives. Coupled with assurances of long-term support, these funds would enable the educational institutions to develop their research and training programs in a consistent and planned manner, to provide stable career support for their established investigators and aid to their younger scientists. This program would augment, not replace the system of individual grants to scientists for the support of specific projects.

Clinical Research Facilities

The second new program provides grants for Clinical Research Facilities to non-federal research institutions. Design of the program is in accord with Congressional emphasis on the needs for additional biomedical research resources to facilitate the more complex types of clinical investigations in a broad spectrum of diseases of health-related sciences.

Behind the original Congressional action in establishing this program were the considerations that (1) clinical research has been insufficient because of a lack of adequate means to provide the careful observation and control needed for research in the complexities of human biology; and (2) that valuable research in animals or in chemical laboratories often has not been carried over into studies in human patients because of a lack of proper research facilities and conditions. One of the principal reasons for these deficiencies has been the high costs associated with clinical research.

Under this program grant funds pay for the renovation and equipment of the centers, the costs of the care of research patients (including specialized nursing, diet kitchens, and other services), supporting laboratories, and certain staff salaries. A clinical research facility, as envisioned for this program is defined as a resource within a medical institution aimed at enhancing the quality of clinical investigations. It is a specific physical unit or research ward of about ten to twelve beds in a hospital, but apart from the general care wards, with a stable, well-trained nursing and dietetic staff to provide precise control and observation, and with directly supporting specialized laboratory facilities.

This program is under way and good progress has been made during the past several months. First-year grants, averaging about a half-million dollars each, have been made to nineteen institutions in every region of the country.

In the northeastern part of the country, in our region, these awards have been made:

1. Yale University School of Medicine, $291,105
   New Haven, Connecticut
2. University of Maryland
   School of Medicine 601,868
   Baltimore, Maryland
3. Harvard Medical School 662,033
   Peter Bent Brigham Hospital
   Boston, Massachusetts
4. Seton Hall College of Medicine
   and Dentistry 395,083
   Jersey City, New Jersey
5. Cornell University Medical College 650,607
   New York, New York
6. New York University 439,997
   Bellevue Medical Center
   New York, New York
7. The University of Rochester
   School of Medicine and Dentistry ... 244,696
   Rochester, New York
8. University of Pennsylvania
   School of Medicine 420,421
   Philadelphia, Pennsylvania

Aid to Medical Education

At this point I can almost hear what some of you folks are thinking — something like this, perhaps, "It's all very fine, of course, these programs for the expansion of the research programs in medical schools and other institutions — but, what about individuals like me? I've got immediate problems. I want to go to medical school. The schools themselves may need help, but so do I, and the costs of medical education are high."

Well, I do not mean to suggest that the programs and projects I have mentioned will meet the total need. We in the Congress are equally concerned with the medical manpower problem and we hope to help. We believe the federal government can and should remove a part of the economic barrier which keeps many talented young people from pursuing careers in medicine.

The blunt truth is that over the past several years our medical schools have been losing ground in the competition for superior college students. At the same time our studies have shown that this country has a relative shortage of medical care manpower which will become acute in the near future if steps are not taken.

There are many reasons why this situation has developed, but among them are (1) a tremendous increase in population; (2) the diversion of many medically trained individuals into the greatly augmented programs of research; (3) increasing demands for medical care arising from rising standard of living, expansion of hospital and medical insurance, and the increasing health-consciousness of our people.

Additionally there are other factors, such as the great length and cost of medical training and the development of many other satisfying and intellectually stimulating scientific career opportunities with high prestige and adequate financial rewards.

The financial problems of medical students are severe. We know that over half of all medical school graduates in the 1959 class were in debt to some degree. Medical school tuition costs have continued to rise, and the average cost of four years in medical school was found to be approximately $11,600 for those graduating in 1959. Scholarship support has been meager, and many promising college graduates who would have liked to study medicine have been discouraged.

To correct these imbalances and to provide the federal funds that the medical and related health professional schools need if current and future manpower needs are to be met is the objective of several legislative proposals now being studied in the Congress. I would like to describe very briefly my own bills which I believe would go a long way toward helping meet our national needs in this area.

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On January 25 of this year I introduced a bill which would provide for a ten-year program of grants for education in the fields of medicine and dentistry to be administered by the U.S. Public Health Service. Under this program each accredited degree granting medical and dental school would receive a block grant of $100,000 each year, together with $500 for each student, plus additional for each student enrolled in excess of average past enrollment.

For schools providing only one, two or three years of professional training in medicine or dentistry, block grants of $25,000, $50,000, and $75,000 respectively would be awarded.

These funds could be used by the schools to meet the costs of establishing, maintaining, and enlarging their teaching staffs and of maintaining, acquiring and operating the necessary equipment.

Here I should like to emphasize that these funds are to meet the costs of new or expanded instruction programs. Special training projects outside the regular curriculum which are financed with other public funds or private grants are excluded. The same exclusion applies to the costs of research and to the operations of any hospitals.

My bill applies a few conditions for institutional eligibility for federal grants that I believe you will agree are entirely reasonable and desirable:

(1) The school must be either a public or a nonprofit private institution located within the United States.

(2) The school must provide reasonable opportunity for the admission of out-of-state students.

(3) During the period it is receiving federal payments, the school must make every reasonable effort to maintain its income for operating expenses from sources other than the federal government at a level equal to that which existed before receiving the federal funds. In the case of a new school, similar efforts should be made to obtain such nonfederal operating income at the highest possible level.

(4) The school will submit from time to time such reports as the surgeon general may reasonably require to assure that these purposes are being carried out.

To advise the surgeon general on the policies and regulations under which the program would operate, there would be established a National Council on Education for Health. In addition to the surgeon general who would be *ex-officio* chairman and the commissioner of education who would be an *ex-officio* member, the Council would consist of ten leaders in the fields of health sciences, education, or public affairs. Four of the ten would be persons actively engaged in the field of professional health education.

On the day after this first bill was offered, I introduced a second piece of legislation designed to provide scholarships to medical and dental students through the states. Under this plan, each state wishing to participate would establish a Commission on medical and dental scholarships or designate an existing agency to serve as the State Commission. The Commission would develop a plan covering certain broad eligibility requirements which are spelled out in my bill, and which stipulates that the annual stipend paid any individual would not exceed $1,250 of federal funds or one-half the amount of the total awarded to the student. My plan also provides that insofar as possible 75 per cent of federal funds awarded the State Commission must be used for medical and 25 per cent for dental scholarships. Another important requirement is that the State Commission review annually the educational progress being made by each scholarship student.

To finance this program the bill calls for an appropriation of $5 million for the first fiscal year beginning July 1, 1961; $10 million for the next fiscal year; and an equal amount for the next eight years.

The surgeon general will be advised on policies, regulations and administration of this program by a National Advisory Committee on Medical and Dental Scholarships. This group will include the surgeon general, who shall also serve as chairman, the commissioner of education, and ten members appointed by the secretary of Health, Education, and Welfare. Three of these shall be recognized authorities in the field of professional education, three shall be teachers or practitioners in medicine or dentistry, and four shall represent the general public.

Since my bills were introduced, others having the same general objectives have been proposed, following up on the request made by President Kennedy in his health message of February 9 that over the next decade the capacity of medical schools be increased by 50 per cent and of dental schools by 100 per cent.

I am particularly impressed with one of the provisions of one of these which would help expand the teaching facilities in much the same fashion that the research facilities of the schools and universities have been expanded by federal grants in recent years.

Under that provision a new ten-year construction grant program would increase the facilities for training physicians, dentists, and professional public health workers by providing federal funds to match non-federal money for new schools or for major expansion of existing schools. Priorities would be based on the amount of training expansion

the construction would make possible and on distributing training opportunities geographically.

Construction grants could be made for any facility needed in teaching medical, dental, or public health students, including teaching hospitals. Where new schools are being built or existing schools are being expanded, the federal share of construction costs could go as high as 66⅔ per cent. Other grants would not cover more than 50 per cent of construction costs.

The proposed bill would also extend, I am glad to say, the present legislative authority for research facilities grants for three years and strengthen it by increasing the present authorization from $30 million to $50 million annually. The existing backlog of over $60 million in preliminary and final grant applications, gives widespread evidence of overcrowding of available facilities in research institutions throughout the country, and the proposed rapid expansion of training programs all underscore the need to extend and increase the present authority for financing the building and improving of research facilities.

The law would modify the present act, permitting the federal government to meet the total cost of a facility to be used for research and other related purposes, including research training. For other multipurpose facilities, the federal portion of construction costs would be limited to the research part or proportionate use of the facility.

I believe the needs are so clearly apparent that this Congress will take affirmative action of some kind. Whatever that action may be, I will do all in my power to make certain that it does not lead to federal control.

I am committed, as I believe you are, to the principle that teaching at every level and in every field of science must remain free of central domination. It must retain flexibility to meet rapidly changing scientific patterns and the particular needs of diverse geographical areas. Finally, it must truly reflect the wishes of the scientific and academic community. All of these requisites are served best when governmental financial responsibility is shared by nongovernmental funds and interests and guided by nongovernmental advice. My proposals stress this factor, and I believe, reflect the wishes of all who know the importance of maintaining the integrity of teaching, of medicine, and of science.

Fifteen years of experience with the NIH research grants, research training, and research construction grants programs have demonstrated that federal assistance has not brought federal control. Instead they have been programs of, by and for free inquiry. They have nourished freedom rather than restricted it. They have helped stimulate a volume, scope and quality of medical research in this country that has no parallel in history.

By following the same principles I believe we can accomplish the same objectives in federal aid to medical, dental, and related education.

LISTING REQUIREMENTS FOR INPATIENT CARE INSTITUTIONS OTHER THAN HOSPITALS AMERICAN HOSPITAL ASSOCIATION

Approved by Board of Trustees
November 21, 1958

1. The institution shall have beds for the care of patients who require continuing planned medical and nursing care and supervision, and who stay on the average in excess of 24 hours per admission.

2. The facility shall be licensed by the state, and shall comply with local governmental regulations.

3. There shall be a duly licensed physician or physicians who shall advise on medical administrative problems, review the institution's plan for patient care, and handle emergencies if the patient's personal physician is unavailable.

4. Each patient shall be under the care of a duly licensed physician, and shall be seen by a physician as the need indicates.

5. There shall be a medical record maintained for each patient, which shall include at least a) the medical history, b) report of physical examination, c) diagnosis, d) physician's orders, e) progress note (medical and nursing), f) medications and treatments given.

6. There shall be arrangements to provide diagnostic services, such as clinical laboratory and X-ray procedures, which shall be regularly and conveniently available.

7. The nursing service shall be under the supervision of a registered nurse, or a licensed practical nurse, with a registered nurse regularly serving in a consultative capacity; and there shall be such other nursing personnel as is necessary to provide patient care twenty-four hours a day.

8. Food served to patients shall meet nutritional and dietary requirements of the patients.

The American Hospital Association may, at the sole discretion of its Board of Trustees, grant, deny or withdraw listing of an institution.

To the Editor:

The Medic-Alert Foundation International wishes to express its appreciation for the article on Medic-Alert which appeared in the March issue of the RHODE ISLAND MEDICAL JOURNAL. This will be of invaluable help in spreading the knowledge of the significance and availability of the Medic-Alert emblems and services.

Again, thank you for your interest and co-operation.

Sincerely yours,
MARION C. COLLINS, M.D., President

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Editorials

A MEDICAL SCHOOL AT LAST?

THESE COLUMNS, perhaps self-consciously, can claim a long historical perspective in the matter of medical education in Rhode Island. In Volume I, Number 1 of the Transactions of the Rhode Island Medical Society issued in 1859 it was stated in an account of the closing of the Medical School in Brown University by President Wayland in 1827: "It was, however, found that the proximity of medical schools in Boston, New Haven, and Pittsfield, which were provided with ample accommodations, would always prevent the growth and success of one in Rhode Island."

Forty years later, in 1899, William Osler stated before the Rhode Island Medical Society: "The existing conditions in Providence are singularly favorable for a small first-class school. Here are college laboratories of physica, chemistry, and biology, and modern hospitals with three hundred beds (*sic*). What is lacking? Neither zeal, persistence nor ability on the part of the physicians, but a generous donation to the University of a million dollars (*sic*) with which to equip and endow laboratories of anatomy, physiology, pathology, and hygiene. These alone are lacking; the money should be the least difficult thing to get in this plutocratic town. The day has come for small medical schools in university towns with good clinical facilities."

Word has now come that the impasse may at last have ended. The first unlikely prediction held true for 102 years. The second, reasonable as it sounded, has only now, after 62 years, come to pass. On June 3 of this year the Corporation of Brown University approved a report expected to "lead to the establishment of a program of medical education at the University in the academic year 1962-63." The press release announced authorization "to proceed with the planning and development of an academic program and to obtain funds for the implementation of a six-year program to prepare students for careers either as physicians or as medical scientists." It continued: "The graduate of the proposed course in medical sciences will have the equivalent of two years of medical school work. At that point . . . he may choose to transfer to an existing medical school, with advanced standing as a third-year student. . . . Or as an alternative he may choose to go into teaching or research in the medical sciences, by pursuing two additional years of study leading to a degree of Doctor of Philosophy in a chosen field."

While we welcome the announcement of this long-overdue academic undertaking, we cannot help but have reservations about some features of the project. Most two-year medical schools historically have resulted from a compromise forced by the lack of clinical facilities. Certainly the excellent hospitals in the Metropolitan Providence area are adequate for medical school purposes. We suspect, therefore, that the reservations in regard to a four-year school have a financial and academic basis rather than the usual lack of such facilities. This inference accords with the statement that: "No decision was made by the Corporation at this time as to the addition of the 'two clinical years' of medical education culminating in the award of an M.D. degree at Brown." It is also consistent with the announced "anticipation" of the "not unrealistic" sum of $15 million in capital and endowment funds, compared to the usually stated figure of $50 to $100 million necessary for the establishment of a full-fledged four-year medical school.

If it were not for the distinguished panel of experts and consultants, including three medical school deans who have participated in the formulation of these plans, we should have been inclined to consider them in some respects rather naïve. But with the weight of authority brought to bear we can only ask questions which appear to be unanswered in the preliminary announcement.

We assume on the basis of statements in the announcement that it is planned to select the students for this program in their freshman year. There are several reasons why this may prove highly undesirable. In the first place, few students of seventeen, eighteen, or nineteen are mature enough to embark upon a program of medical education, and fewer still are sufficiently orientated or motivated to know at all, or with any degree of certainty, what type of career they may wish to pursue. It also seems unlikely that suitable students

can be selected that early in their academic development on the basis of tests or performance. Without at least a year or two of college experience to find themselves, many do not know whether they will even care to choose a scientific or a medical career.

Furthermore if pursuit of excellence is a desirable aim in medical education, and we believe it is, no devices should be used which will divert students from seeking the broadest possible liberal education before plunging into the narrowing confines of medical discipline. With glowing promises of an "integrated curriculum," the proposed program attempts "to offer the pre-medical student a rationally planned course of study from the beginning of his freshman year through what would normally be his second year of graduate study in the medical Sciences." Harvard Medical School has striven hard to make "premed" virtually a term of derogation. While insisting on broad academic excellence and an almost irreducible minimum of prerequisite scientific courses (in fact often favoring candidates who have taken only the minimum), it has actually succeeded in attracting an increasing percentage of "A" students, and at the same time students of increasingly broadened interests, to its entering classes, while the trend of academic attainment of medical school candidates has been downward in the country at large.

In regard to the six-year A.B.–M.D. program at Boston University, which incidentally is itself rather ambiguous, it has realistically been pointed out that "some of the students may prove to be unsuited for a career in medicine." Provision is made for replacements for those who drop out. This type of attrition, certainly more characteristic of undergraduates than of students in the better medical schools, is another problem that must be faced. How will the losses from attrition in the twenty-five initially selected candidates be managed? If replacements are selected, the concept of "integration" immediately becomes modified or clouded.

Certainly many students with high academic potential who may plan to enter medical school from Brown will either shun the program completely, or leave it if they have ambitions to enter another medical school. These superior students will be lost to the program, whereas some of them might be picked up under conventional competitive admissions at the end of college. In addition, if it is planned to confine the two graduate years to those students coming up in the six-year program, many excellent candidates who may choose to enter the Brown preclinical years from other colleges will be lost. If it is planned, however, to fill vacancies from outside sources a compromise amounting to the conventional setup of a two-year medical school will inevitably result. We feel accordingly that the proposed plan is rather better calculated to attract students to the biological science departments, than to recruit superior scholars for clinical medicine and medical research. This result is perhaps not unexpected considering the orientation of the faculty panel on "academic feasibility" which has been responsible for drawing up this plan.

We have other reservations. It is rather unlikely, in the long run, we think, that Brown's "outstanding faculty . . . , equipment and physical facilities now available or soon to be acquired," or its Institute of Health Sciences, excellent as these undoubtedly are, can really qualify as the basis for a medical school or medical faculty. The outstanding successful medical schools in the country practically all have facilities and faculties largely additional to and somewhat independent of other college or university complements. Undergraduate or graduate biological science departments are not of the substance or bent required to constitute a first-rate medical school. Experience will eventually bear this out.

Certainly adequate teaching of human anatomy and pathology is of quite a different order than is generally found in academic institutions. Furthermore, hospital affiliations are necessary even in the "preclinical" years for proper orientation in the teaching of these disciplines as well as for the related physical diagnosis now usually taught during the preclinical years. It is certainly highly desirable that the faculty of pathology be actively engaged in hospital practice.

One final thought we think is worthy of mention. Consultations with the leading hospitals regarding necessary affiliations cannot begin too soon. With one of our large hospitals now seeking full-time chiefs of medicine and surgery, it would be a most propitious time for mutual consultations; the task of finding qualified men for these positions will be greatly facilitated, if the prospective candidates can be assured a university teaching position. Close affiliation and integration of the medical school and hospitals should be undertaken during the earliest planning.

CLEAR YOUR MEETINGS TO AVOID CONFLICT

EVERY YEAR the number and variety of medical meetings in Rhode Island has been increasing. This is particularly true in the metropolitan area of Providence with its numerous hospitals and professional groups.

Although conflicts are inevitable as the complexity of the academic programs increases, it is desirable to avoid such conflicts as much as possible.

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When two good programs are planned for the same date and time, it is disheartening to have each suffer because of competition with the other for the available audience. Prospective listeners are also frustrated when they are unable to attend both programs.

Although this type of problem will always be with us to some extent, every effort should be made to minimize it. It should be pointed out that the executive secretary of the Rhode Island Medical Society keeps a registry of meetings. Consultation with this registry will help to eliminate unnecessary conflict.

HYPOCRISY IN THE STATE HOUSE

THE POLITICIANS in the Rhode Island State House are wont to shed crocodile tears concerning the ever increasing costs to the public for coverage by Physicians Service and Blue Cross. It is perfectly obvious, however, to any informed observer that in the majority of instances they are talking out of both sides of their mouths at the same time. Periodically bills have been introduced into the General Assembly to investigate these plans, presumably with the inference that there is some hanky-panky going on. The Director of Business Regulation ordered a massive study of the two plans and then public hearings on the pretext that he has a "responsibility" to the public in these matters. A reading of the "Special Report of the Affairs of the Rhode Island Blue Cross and Physicians Service Plans" prepared for Director Harold C. Arcaro of the Department certainly reveals no significant variations from good practice or efficient administration.

At this writing we are greatly concerned over Governor John A. Notte's performance in regard to recent legislation affecting both plans. The first, relating to Blue Cross, and actually promoted by the governor, requires Blue Cross to pay to certain state and municipally owned hospitals full Blue Cross benefits, whereas previously, on the basis of negotiations, certain partial payments were made. The argument was put forward that, while Blue Cross was paying only nominal benefits in such cases, the insured were paying full premium rates. What was not stated, in line with the policy of half-truths, was that this would cost Blue Cross some $500,000 yearly and result in a *premium rate increase of five per cent.* The legal status of this bill is still in doubt, because of certain legislative errors which have not yet been resolved.

On June 9, almost furtively, the governor signed into law a bill requiring that, if a nonprofit medical service corporation provides services that lawfully may be rendered by a chiropodist or podiatrist, the service contract shall include coverage for such services. The report of this action was hidden in the back pages of the daily newspaper in print so fine as to be almost illegible.

The impact of this legislation on the always delicately balanced finances of Physicians Service will probably be very serious. If every corn and callus is to be interpreted as an "external excrescense" (payable under the contract), the result may indeed be catastrophic. An additional cost will be the payment for X-rays. Of great concern to the medical profession is its inability properly to police sound ethical and professional performance among para-medical groups through its duly constituted committees. An informal estimate of the cost of this new imposition on "The Doctors' Plan" runs to a substantial proportion of one million dollars yearly, out of a yearly premium income (for 1960) of some eight million dollars. The senior citizens, much beloved of the politicians, most of whom pay their own premiums, will find their sore feet expensive indeed.

These performances most certainly represent *Hypocrisy in the State House.*

IMPORTANT LEGAL OPINION

THE ATTORNEY GENERAL of the State of New York, the Hon. Louis J. Lefkowitz, has reversed a decision of a preceding attorney general, making it now legal for registered professional nurses to carry out certain intravenous procedures.

In his opinion, the attorney general said: "Intravenous procedures limited solely to those involving venipuncture by needle and which do not involve incision into or incision to reach a vein reasonably can be considered to be encompassed within the language of the statute giving a registered professional nurse authority to carry out treatments and medications prescribed by a licensed physician."

He added, however, that there appeared to be a need for specialized training for nurses performing the intravenous procedures and urged that the State Education Department recommend inclusion of this procedure in the curriculum of schools of nursing.

In addition, he suggested that hospitals and other nurse-employing agencies in the state establish inservice training programs to qualify nurses to carry out the intravenous procedures.

"Nothing in this opinion should be construed as an attempt on my part to alter or change the legal principles governing the relationship between a

physician and a patient and, in the case of a hospitalized patient, the relationship between the physician, hospital, and patient," the attorney general said.

Since the earlier opinion of 1942, advances and changes in medical practice and in attitudes of both medicine and nursing have made this liberalization desirable.

Experience in World War II and the Korean action explored the technic and proved the acceptability of using trained personnel such as registered nurses for this particular procedure.

Mr. Lefkowitz consulted with the Council of the Medical Society of the State of New York which passed a resolution approving this decision.

The physician who prescribes intravenous therapy to be given by a registered nurse trained in this procedure is fully responsible for this, as indeed he is for any treatment he orders.

. . . Editorial from the NEW YORK STATE JOURNAL OF MEDICINE, Vol. 61, No. 10, May 15, 1961

HIGHWAY SAFETY AND SEAT BELTS

THE PLAN of the automobile industry to provide safety belt attachments in the automobiles of 1962 is an excellent one. It is well known that people who wear safety belts while riding in their automobiles in general survive accidents better than those who do not wear them.

There are, however, two huge problems remaining to be solved. The first is to persuade car owners to buy safety belts (only the attachments will be provided), and the second problem is to get people to use them.

Once the attachments are standard equipment, the automobile industry, the medical profession, and others such as the police, state and local governments, the press, radio, and television should combine to do a real selling job. It will require a major promotional effort, and success will not come quickly.

No one wants to be reminded of disaster while pursuing pleasure. It will not be easy to get the family to fasten seat belts while they are enjoying a pleasant Sunday afternoon drive. It will be the last thing on the minds of young men and their girl friends as they start on an evening of courtship.

With the business of hardware for seat belts out of the way the automobile industry should start building other safety features into the automobiles themselves, such as double-locked doors and steering levers. In the meantime the seat belt attachment is a definite improvement, and it directs attention to the basic fact that safety is everybody's business. Let us all get behind this movement.

MEMBERS ARE INVITED TO SUBMIT ORIGINAL ARTICLES, ABSTRACTS OF PAPERS PUBLISHED IN OTHER MEDICAL PUBLICATIONS, AND LETTERS OF COMMENT FOR POSSIBLE PUBLICATION IN THIS JOURNAL.

RHODE ISLAND HEALTH LEGISLATION, 1961

Report of the Committee on Public Laws of the Rhode Island Medical Society

THE JANUARY, 1961 session of the Rhode Island General Assembly was concluded with a forty-hour continuous meeting ending on June 3, making one of the longest sessions of the legislative body in many years.

All legislation introduced during the session was checked by the Society's executive office, and acts and resolutions of a public health or medical nature were reported to the Committee on Public Laws which, after review, notified various Assembly committees of its opinions. Attached to and made part of this report is a listing of major bills of this category that were enacted, as well as those that were left in committee, some due in part to the action of the Society's report on the dangers inherent in the legislation to the public generally.

Legislation that would weaken the basic science act was protested by the Society, and the bill was not reported out of committee. Similar action resulted in the proposal that chiropractic physicians be compensated for treating public assistance recipients.

Of major interest to physicians was the enactment, after a veto by former Governor Del Sesto for two years, of legislation that would require Physicians Service to compensate chiropodists for services they might render for which an indemnity is payable to doctors of medicine under the service plan's contract with subscribers. The protest of this legislation was handled by the Physicians Service legal counsel and staff, but the bill was acted upon favorably by the Assembly in the final day, and signed five days later by Governor Notte.

The objection of the pathologists of the state to a bill to license clinical laboratories was supported by the Society, and a proposed compromise that a committee of pathologists meet with a committee named by the state director of health after the conclusion of the Assembly session to draft a model act for 1962 introduction was overlooked in the final day and the act passed and signed by the governor. The major question in the minds of many is why an $11,000 appropriation is needed to license and inspect the few clinical laboratories existing outside of the hospitals.

Tenure for the state director of health for a period of five years won Assembly approval. Other legislation enacted included a bill that requires that all public and private schools maintain health programs approved by the director of health and the commissioner of education, requiring that students be tested in their speech as well as their sight and hearing; a bill setting up licensure requirements for social workers, and resolutions approving the use of the Cranston Street Armory for the Rhode Island Medical Society's Sesquicentennial Exposition of Health Progress, memorializing the late Doctor Arthur H. Ruggles, and the late Doctor John E. Donley, and changing the name of the state curative center to the Doctor John E. Donley Rehabilitation Center.

In the field of workmen's compensation, bills upon which the Society's Committee on public laws took no stand were passed which raised the maximum compensation for the totally disabled from $36 to $40, and increased from $300 to $600 the maximum allowable charge in the case of an injured employee hospitalized for not more than two weeks, and from $600 to $1,200 the maximum in the case of an injured employee hospitalized for a longer period, increased the diathermy and massage allowance from $75 to $125, and provided that all hospital fees for treatment and services shall be limited to the prevailing community charges for private patients in semiprivate rooms rather than those in ward accommodations.

In addition to legislation noted above that was left in committee on adjournment, other bills receiving a similar fate included one that would amend the statute relating to the licensure and practice of electrolysis, one that would establish licensure requirements for medical technologists, one introduced by the medical society to allow for physician's lien in accident cases, a bill that would permit the incorporation of professional groups, and many workmen's compensation proposals, including one to provide compensation for occupational deafness, and one that would make it possible for compulsory referral to the state rehabilitation center.

A summary of the major health and medical acts enacted, and those left in committee files, is included.

COMMITTEE ON PUBLIC LAWS
F. B. AGNELLI, M.D., *Chairman*

Rhode Island General Assembly, January Session, 1961, Legislation Enacted

Bloodmobile. S-250. A resolution making an appropriation of $3,000 to be expended by the American Legion, Department of Rhode Island, in the operation of its program concerned with the bloodmobile. Enacted June 12.

Blue Cross. H-1777-A. An amended bill that requires a nonprofit hospital service corporation to pay for services of subscribers in hospitals operated by the state or any municipality of the state on the same basis as all other hospitals. Became law without the governor's signature, Chapter 191.

Civilian Defense. S-113. A resolution memorializing the President and the Congress relative to the establishment of a prompt and affirmative policy encouraging and assisting the citizens of the United States in constructing fallout protection shelters in the event of a nuclear attack. (An income tax deduction for the cost of a shelter, up to $100 per planned shelter occupant, is included.) Enacted April 26.

Clinical Laboratories. H-1519. An amended bill providing for the licensing of clinical laboratories by the State Department of Health, and providing an $11,000 appropriation for the first year. Enacted June 6, Chapter 94.

Evidence. H-1383. A bill permitting contact prints of destroyed records to be admissible in courts as evidence. Enacted June 8, Chapter 148.

Forand-Type Bill. H-1094. A resolution memorializing the Congress of the United States to enact legislation to carry into effect the plan of former Congressman Aime Forand by including medical care to the aged under the social security system. Enacted February 23.

Health Director Tenure. H-1600. Provides for a five-year term for the director of health, full time on the job, with provision that he shall be a physician graduated by an accepted medical college, also skilled in sanitary service and experienced in public health administration, and shall have one year minimum of community graduate instruction in public health administration. Enacted May 29, Chapter 99.

Household Chemicals. S-462. An act providing for the labeling of poisonous chemicals contained under pressure and dispensed in the form of a spray. Enacted June 8. Chapter 132.

Ladd School. S-537-A. An amended bill replacing the advisory commission on Dr. Joseph H. Ladd School with a thirteen-member Governor's Advisory Commission on Mental Retardation. Enacted June 8. Chapter 135.

Physicians Service. S-595. An amendment that would include as purveyors of "medical services" persons licensed as chiropodists or podiatrists. Enacted June 8. Chapter 136.

Polio Vaccine. H-1452. A resolution making an appropriation of fifty thousand dollars for the distribution and use of polio vaccine by the State Department of Health. Enacted March 23.

Memorial to Dr. Arthur H. Ruggles. H-1053. A resolution upon the death of Doctor Arthur H. Ruggles, former director and physician-in-chief of Butler Hospital, and former member of the State Parole Board. Enacted January 13.

School Health. S-467-A. An amended bill providing that all public and private schools maintain school health programs approved by the director of health and commissioner of education, requiring that students be tested in their speech as well as their sight and hearing, and appropriating $15,000 for the testing equipment. Enacted June 8. Chapter 133.

Scituate Hospital Corporation. S-470. An act permitting stated persons to incorporate the Scituate Hospital Association for the purpose of acquiring and holding land, funds, etc., for the purpose of establishing and maintaining a hospital in Scituate. Enacted June 8.

Sesquicentennial of Rhode Island Medical Society. S-368-A. An act permitting the Society to use the Cranston Street Armory for its Health Fair, April 6-17, 1962. Enacted April 27.

Social Workers. H-1152-A. An amended act that provides for the registration of social workers under the board of registration composed of five registered social workers serving staggered terms. The applicant must have a master's degree from a school of social work accredited by the council on social work education or its predecessor. Workers five years in the field within the ten-year period prior to enactment of the law would be qualified under a "grandfather" clause. Enacted June 8. Chapter 146.

State Curative Centre. H-1073. An act changing the name of the Curative Centre of the State of Rhode Island to the Doctor John E. Donley Rehabilitation Center, in honor of the late Doctor Donley, medical director of the centre for fifteen years, and also a past president of the Rhode Island Medical Society and editor of the RHODE ISLAND MEDICAL JOURNAL. Enacted January 31, Chapter 5.

Veterans. S-1160. A resolution opposing efforts to diminish services to veterans at the several United States veterans' administration hospitals throughout the United States, memorializing Congress and other officials in authority, asking that said services shall not be diminished. Enacted February 8.

* * *

H-1075-A. An amended resolution creating a special commission to make a study of departments of veterans' affairs of other states and to determine

continued on next page

the feasibility of establishing a department of veterans affairs in Rhode Island. Enacted June 6.

Workmen's Compensation

Medical Services. H-1142. An amendment raising maximum charges for medical services to $600 for the nonhospitalized employee, or the employee hospitalized not more than 14 days, and to $1,200 for the employee hospitalized more than 14 days. Charges for diathermy and massage treatments would not exceed $125. Enacted May 24. Chapter 61.

Second Injury Fund. S-620. A bill removing the requirement that the workmen's compensation Second Injury Fund contain at least $250,000 before dependency payments are made from it, and requiring insurers to make payments to the fund when it falls below $350,000, instead of $100,000, and providing for the suspension of payments when the fund exceeds $500,000 instead of $150,000. Enacted June 6. Chapter 82.

Totally Disabled. S-181. A bill raising the maximum workmen's compensation benefits for the totally disabled from $36 to $40 weekly. Enacted June 8. Chapter 123.

Rhode Island General Assembly, January Session, 1961, Health Legislation NOT ENACTED

Basic Science Law. S-161. An act amending the basic science act to eliminate the provision that an applicant "shall also have completed at least one (1) year of preprofessional collegiate education and training in an accredited academic college."

Blue Cross–Physicians Service. H-1090. A resolution creating an eight member legislative commission (5 from the House and 3 from the Senate) to study and make recommendations and propose legislation concerning the operation and rates of Blue Cross and Physicians Service and in the field of health and accident insurance generally in Rhode Island. To enable the commission to engage expert personnel an appropriation of $15,000 is proposed.

NOT PASSED

Charles V. Chapin Hospital Transfer to State. H-1410. An act transferring the C. V. Chapin Hospital from the city of Providence to the state of Rhode Island, and providing for the transfer of the employees from city to state supervision.

Chemical Test Law. H-1370. In substance amends the motor vehicle code to provide that any person who operates a motor vehicle in the state shall be deemed to have given his consent to a chemical test of his breath, blood, urine, or saliva for the purpose of determining the alcoholic content of his blood, provided that such test is administered at the direction of a police officer acting in accordance with the rules and regulations established by the police department of which he is a member and who has reasonable grounds to believe such person to have been driving in an intoxicated condition.

Chiropractic. S-285. The bill would amend the public assistance act to permit chiropractors to treat recipients of state welfare aid through the Division of Public Assistance.

Electrolysis. S-600. A bill amending the act for the licensure of electrologists, providing for apprenticeship under a licensed electrologist for 650 hours within a 9 months period; and setting up qualifications for teaching electrolysis.

Evidence. H-1227. An amendment to Chapter 19 relating to "Evidence" to provide the admissibility in evidence of bills for medical, dental and hospital services in personal injury actions. Under the proposal an itemized bill sworn to by the physician, dentist or hospital agent, would be admissible as evidence of the fair and reasonable charge for such services.

Health Insurance. S-156. An act providing health insurance for state and retired state employees.

Medical Technologists. S-236. An act providing for the licensure and registration of bioanalysis, technologists and bioanalytical laboratories by a board of medical technology consisting of the state director of health, two physicians (one a pathologist) and four technologists who have had ten years of practice, all to be appointed by the governor. Physicians and hospital laboratories would be exempt, except that technologists working for physicians or hospitals would have to be licensed.

Narcotic Act. S-463. An act amending sections of the Uniform Narcotics Act.

Medical Groups, Incorporation of. S-493. An act titled "The Professional Corporation Act of 1961" which would allow individuals duly licensed (i.e., physicians) to form a professional corporation for pecuniary profit under the provisions of The Stock Corporation Act for the sole purpose of rendering the same and specific professional service.

Pharmacy. S-579. Amendments to the pharmacy act that would prevent a registered pharmacist from directly managing, controlling and supervising more than one shop or store, and would also provide that whenever a store is open there shall be continuous supervision by a registered pharmacist.

Public Assistance. S-592. An amendment providing that there shall be a one-year residence for public assistance benefits (there is no residence requirement now) unless there is proof the applicant did not move to Rhode Island expressly to secure P.A.

Physician's Lien. S-136—H-1236. These acts provide that a physician may file a lien on a claim for services rendered to a person injured by rea-

son of an accident not covered by the workmen's compensation act. The lien follows prior liens by the attorney and the hospital.

Public Assistance. S-164. An act amending the public assistance statute to require a one-year residence in Rhode Island before application can be considered for aid.

Workmen's Compensation

Coverage Extended to One or More Employees. S-204. A bill extending workmen's compensation coverage to shops of one or more employees, instead of four or more. H-1069. An amendment to provide that an employer of two or more workers would be subject to the law.

Filing Time for Latent Physical or Mental Impairment. H-1349. An act providing that the time for file claims in cases of latent or undiscovered physical or mental impairment due to an injury shall not begin to run until the claimant knew of the existence of the impairment, or after disablement, whichever is later.

Impartial Examination and Compulsory Use of Curative Center. S-218. An act providing that if injury to the worker involves his back, head, nerves or nervous system, or broken bones, and if compensation has been paid for a period of six months, the Commission would be directed to appoint an impartial medical examiner to examine the employee. The examination would be repeated at six-month intervals as long as the employee continued to be compensated.

The measure would also empower the Commission to *require* any employee to report to the Curative Center for treatment where in its judgment treatment was practicable and likely to speed recovery. Failure to report to the Center would mean a suspension of rights to compensation and possible forfeiture of compensation during the period of suspension.

Injuries "In Course of Employment"; Definition of Personal Injury. S-201. A bill removing the requirement that personal injuries subject to coverage arise "in the course of employment" and be connected and referrable to employment; defining personal injury to include mental or physical damage arising from employment; and extending coverage to include damage or loss of prosthetic appliances.

Occupational Deafness. H-1013. An act providing additional compensation benefits for occupational deafness.

Rate Reports. H-1190. A resolution directing the insurance commissioner to report to the general assembly and explain the reason for the high rates involved in the workmen's compensation insurance program.

Waiver on Pre-existing Physical Disability. S-220. An act permitting the Commission in writing to authorize a waiver of rights to compensation relating to a physical disability existing and known to the employee at the time he obtains work. (Persons with hernia or heart conditions and the like are reportedly unemployable under the present law, and if they could waive disability payments, employers might hire them.)

DISTRICT MEDICAL SOCIETY MEETING

PAWTUCKET MEDICAL ASSOCIATION

The monthly meeting of the Pawtucket Medical Society was held on Thursday, April 20, 1961.

Business affairs of the Pawtucket Medical Society were discussed.

Mr. Thomas Grant of the G. H. Walker Company was the speaker of the evening. The topic was *Investments and the Physician.*

* * *

The monthly meeting of the Pawtucket Medical Society was held at the Lindsey Tavern on Thursday, May 25, 1961, at 8:30 P.M. The following members were present: Doctors Cunningham, Moreno, Fortin, Hogan, Boucher, Schiff, Sonkin, Raheb, H. Hanley, Demopulos, Pinault, Gorfine, Lussier, Billings, A. Jaworski, Hayes, Zolmian, Sod, Yashar, Doll, E. Foster, Metcalf, H. Turner, Mara, Stapans, Barry, Quinn, Hecker, Forgiel, Senseman, Lovering, Lappin, and Liang.

A letter was read from Doctor Charles Farrell requesting a change in membership from regular to associate member. This request was granted.

An application was read from Doctor Edward Spindell requesting associate membership in the Pawtucket Medical Society. This letter was forwarded to the proper committee.

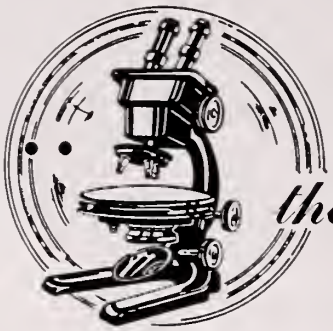
A motion was made and carried that "the members of the House of delegates from the Pawtucket Medical Association introduce a motion at the following meeting of the House of delegates of the Rhode Island Medical Society requesting a detailed breakdown on the financial affairs of the Rhode Island Medical Society."

Doctor Gerald Solomons was the speaker of the evening. His topic was, *The Child Development Study, under the Joint Auspices of Brown University and the U. S. Public Health Service.*

The talk was well received and a general discussion followed.

Respectfully submitted,

ROBERT FORTIN, M.D., *Secretary*

THROUGH . . .  *the Microscope*

North Dakota Physician New A.M.A. President

Doctor Leonard W. Larson, Bismarck, North Dakota, has been installed as the 115th president of the American Medical Association, succeeding Doctor E. Vincent Askey, Los Angeles.

Doctor Larson, 63, one of the nation's leading pathologists, has long been active in A.M.A. affairs. He was a member of the A.M.A. House of Delegates from 1940 to 1950. He served on the A.M.A. Board of Trustees from 1950 to 1960. As chairman of the A.M.A. Correlating Committee on Lay-Sponsored Health Plans, he was instrumental in formulating the "Twenty Principles" covering the relationship between the medical profession and the plans.

Subsequently, he was appointed chairman of the Commission on Medical Care Plans which made a four-year study of such important subjects as free choice of physician and the relationship of the third party mechanism to the practice of medicine.

Doctor Larson was a U. S. delegate to the World Medical Association for four years and a member of the U. S. delegation to the United Nations' World Health Organization in 1952, 1953, and 1959.

For his contributions to the science of cancer control, Doctor Larson received a gold medal in 1953 from the American Cancer Society. He also received a certificate of highest merit from the American Society of Clinical Pathologists.

Born in Clarkfield, Minnesota, of native Norwegian parents, Doctor Larson was graduated *magna cum laude* from the University of Minnesota Medical School in 1922. Following a brief period of general practice in Northwood, Iowa, he returned to the university for postgraduate work in pathology, and joined Quain and Ramstad Clinic in Bismarck in 1924. He has been a clinic partner since 1939.

How Many Hospital Beds Needed?

One of our recent reports on the federal department of Health, Education and Welfare on the status of all Hill-Burton grants for Rhode Island to date shows:

Twenty projects completed and in operation at a total cost of $24,828,934, including a federal contribution of $4,148,814. The projects supply 560 additional beds.

Sixteen projects under construction at a total cost of $14,307,479, including a federal contribution of $3,020,565, and designed to supply 428 additional beds.

Two projects approved but not yet under construction, including above, at a total cost of $885,000 including $107,445 federal contribution and designed to supply 16 additional beds.

For a "crash" program started many years ago to meet an emergency the Hill-Burton plan now appears as a permanent organization, giving further substantial evidence of the procedure that evolves once the federal government gets involved in a spending program.

Surgeon General Appoints Group to Study Nurse Shortage

Secretary Abraham Ribicoff told the surgeon general's Consultant Group on Nursing, meeting in Washington June 12 and 13, that the nurse is the "magic ingredient" in health services.

"If we are expanding in every field of health and medicine, we will be self-defeating if we do not do something about the shortage in nursing," he said.

In support of this point, the secretary's special assistant for Health and Medical Affairs, Boisfeuillet Jones, said that in the past several years the "quite evident shortage became a national problem which has required national attention." He emphasized that President Kennedy hopes the group will outline problems in nursing and the best ways of handling them, and, when necessary, make legislative proposals for their solution.

The group was appointed by Surgeon General Luther L. Terry to further the administration's intention, stated by the President in his February 9 health message, of relieving the nursing shortage and of developing "for nursing, as we have for medicine and dentistry, a formulation of needs and

training requirements" for submission to Congress this year. Doctor Alvin C. Eurich, vice-president of the Fund for Advancement of Education, Ford Foundation, is chairman. Among the twenty-one members appointed to serve with him are nurses, physicians, hospital administrators, educators, and social scientists.

Housewife Holds Key to Family Disaster Survival

A simple recipe for distilling radioactivity out of contaminated water was given by the civil defense chairman of the Woman's Auxiliary to the American Medical Association at its meeting in New York on June 27.

Steps that a housewife can follow to provide safe drinking water for her family were outlined by Mrs. Neil W. Woodward, Oklahoma City, before a meeting of the Auxiliary at the Hotel Roosevelt. The steps to decontaminate water are:

—Thoroughly clean a cookie sheet.
—Place exposed water in kettle over fire and boil.
—Hold cookie sheet at an angle 18 inches above kettle.
—Catch the steam that has been condensed to pure water in an uncontaminated container.

While food, water and shelter are the keys to survival in time of disaster, Mrs. Woodward said that housewives today are either too apathetic or just not taking the time to safeguard their homes against a thermonuclear attack.

Sufficient food and water should be stored to meet family needs for at least two weeks, she said.

"Packaging is more important than the food you select," she said. Containers must be moisture and vermin proof and of a material that will not corrode.

She also cautioned housewives to select foods that need little or no cooking since it may be necessary to heat them over a candle, canned heat or camp stove.

Foods stored in airtight containers may be decontaminated by washing with soap and water, she said. However, the water that is used to clean these foods becomes radioactive and must be disposed of by pouring where it can be covered with earth.

"Bananas and many other foods can be decontaminated by peeling," she said. "But these peelings also are radioactive and must be buried. Burning will not destroy radioactivity."

Mrs. Woodward called on physicians' wives—who make up the 80,000 members of the Auxiliary—to take the lead in getting America's homes prepared for an emergency.

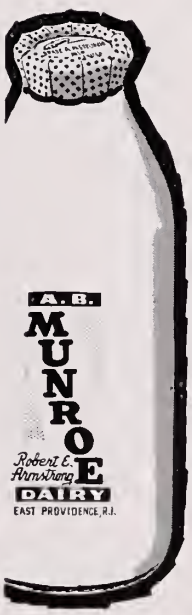
Dartmouth Announces Gift of Medical Students' Dormitory

The Dartmouth Medical School has received from the Strasenburgh family of Rochester, New

continued on next page

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York, financial support in the amount of $325,000 for construction of vitally needed living quarters for medical students, according to a report to the Dartmouth Board of Trustees at its Commencement meeting by Doctor S. Marsh Tenney, dean of the Medical School. With this generous contribution and the recent grant from the Kellogg Foundation for a new auditorium, the Dartmouth Medical School campaign has reached $6,000,000 of its $10,000,000 objective.

Dean Tenney stated that "the new living facility will accommodate approximately eighty medical students and will be located near the new Medical Science building. Its close relationship to the hospital, research and educational facilities of the School will make it an integral part of the developing Dartmouth Medical School campus. By living and studying within the complex unit of a medical center, the spirit as well as the purpose of professional life is continuously apparent to the student. A community motivated by common interest facilitates learning and the acquisition of those ideals so essential for future practitioners of medicine."

Construction of the new medical dormitory is expected to begin late in 1961.

Surprise! Women are Weaker Sex

It may come as a surprise but women really are the weaker sex—at least as far as acute health conditions are concerned.

Although the life expectancy of females is six years more than for males, along the way the average woman can expect to suffer acute health conditions more frequently, resulting in a greater number of days of restricted activity and bed confinement, the Health Insurance Institute said recently. The Institute based its findings on an analysis of data from the U. S. Public Health Service.

In the period of one year, 368 million acute health conditions were reported in the U. S. These conditions, with certain exceptions, are defined as those which last less than three months and which involve either medical attention or restricted activity.

In the surveyed year, women suffered 197 million acute conditions to 171 million for men. This worked out to a rate of 224 conditions for every 100 women, and 205 conditions for every 100 men, said the Institute.

However, the average woman suffered 9.4 days of restricted activity as a result of these conditions compared to 7.5 days for the average man, and also incurred 4.0 days of bed confinement to the male's 3.2 days, declared the Institute.

Women were not ahead of men in all categories of acute health conditions. The survey showed that men more frequently suffered from infectious and parasitic diseases (including viruses), and injuries, while women led in respiratory conditions (including colds), digestive system conditions, and a catch-all category known as "other conditions."

Average Charges in Hospitals Vary by Area, Services, Size

Hospital patients in California, Oregon, Washington, Hawaii and Alaska pay bed-and-board charges averaging 80% more than patients in Texas, Oklahoma, Arkansas and Louisiana.

Average charges in hospitals of the South Atlantic states are 35% lower than those in New England.

The great variability of going rates for hospital services was measured by the American Hospital Association in a survey conducted last year and reported recently.

In over 4,400 hospitals, the A.H.A. found the following average daily charges for private and semi-private (two beds in a room) accommodations, including food services, routine nursing care and minor medical and surgical supplies:

REGION	PRIVATE ROOM	TWO-BED ROOM
New England	$26.20	$21.80
Middle Atlantic	24.10	19.30
East North Central	21.30	17.90
West North Central	18.40	15.50
South Atlantic	17.30	14.10
East South Central	15.70	12.50
West South Central	14.90	12.40
Mountain	19.60	16.40
Pacific	27.40	23.60

Charges for semi-private accommodations with three or four beds in a room generally were 10-15% lower than rates for two beds in a room as of October 1, 1960, the formal survey date.

Returns also showed increasingly higher average charges with increasing size of hospital for the following categories of accommodations: single-bed, from $13 in hospitals of less than 25 beds to $24.30 in hospitals with 500 beds or more; two-bed, from $12.40 to $19.20; and four-bed, from $11.90 to $18.70.

Surgeons Plan Outstanding Clinical Congress in October

Latest applications of surgical research and new surgical techniques will be described at the world's largest meeting of surgeons, the 47th annual Clinical Congress of the American College of Surgeons, in Chicago, October 2-6, 1961.

More than 11,000 surgeons and physicians, from all over the United States, Canada, and many foreign countries are expected to attend this widely instructive five-day meeting. Approximately 1,000 doctors will take part in the program of nine postgraduate courses, 258 new research reports from medical centers throughout the country, 68 medical

motion pictures, 26 cine clinics, 14 operative telecasts from Billings Hospital of the University of Chicago, and 300 scientific and industrial exhibits.

Doctor John T. Reynolds, Chicago, clinical professor of surgery, University of Illinois College of Medicine, is chairman of the committee on local arrangements.

Major addresses will be made by Doctor Robert M. Zollinger, Ohio State University College of Medicine and incoming president of the College, speaking on *Surgical Tithing*, Doctor Francis D. Moore, Harvard Medical School, giving the annual Baxter Lecture on *The Control of Effective Volume and Tonicity; Body Composition*, and Doctor Preston A. Wade, Cornell University Medical School, presenting the annual Trauma Oration, *The Specialist and the Injured Patient*.

This year's historic Martin Memorial Lecture, commemorating the College founder, Doctor Franklin H. Martin, will be given by Admiral Hyman G. Rickover.

More Than Six Million Reported to Have High Blood Pressure

More than six million Americans have high blood pressure, according to a recent issue of *Patterns of Disease*, a Parke, Davis & Company publication for physicians. Of these, the overwhelming majority do not have a heart condition—some 900,000 have both hypertension and a heart condition, while about 5,270,000 are hypertensive without a heart condition.

Among a group of city dwellers, the disease without heart involvement afflicted 66 persons for every 1,000 in the population, compared with 118 per 1,000 among rural dwellers. The disease also strikes about two to four times more often among Negroes than among whites according to *Patterns*.

"A difference of opinion exists as to just what constitutes 'normal' and 'abnormal' blood pressures," according to *Patterns*. "According to one study, the average blood pressure of healthy males, aged 20-24 years, is 123/76. A similar figure, 119/73, is given for males of this age range in another study. According to yet another report, normotension refers to blood pressure below 140/90; hypertension is defined as systolic pressure of 160 mm. Hg and over, or diastolic pressure of 95 mm. Hg and over, or both."

In comparing the mortality rate of persons with high blood pressure with that of persons insured as standard risks, *Patterns* states "the higher the blood pressure, the greater the risk." For every 100 deaths among those insured as standard risks, there are 124 deaths among persons in their thirties with moderately elevated systolic or diastolic pressures, 125 in their forties, and 120 in their fifties. Among those with both systolic and diastolic pressures moderately elevated, there are 184 deaths in the thirties, 170 in their forties, and 147 in their fifties for every 100 deaths among persons insured as standard risks. Sharply higher figures are shown by *Patterns* for those with "markedly elevated" blood pressures.

Check Needs in 'Teen, Senior Years

If your family includes an aged dependent or an aging teen-ager, better check on his or her health insurance coverage, the Health Insurance Institute advises.

At or after age 19, dependents' coverage may terminate under your family plan. Or the dependent may continue to be covered to age 23 or even 25, provided he is still at school or college.

What should you do if you have a youngster leaving the protection of the family health insurance plan?

If he is going to work, he should ask the employer or personnel director about the firm's health benefits program. If the employer is paying part (or all) of the premium costs, the group program should be particularly attractive.

A wide range of individual policies also are available. Rates for young people are comparatively low. By shopping around, you may find a policy that fits your ex-dependent's needs and situation to a "T."

Choice for Older People

For your aged dependent, you also have a varied choice of individual insurance plans to help cover his or her health costs. A representative list of policies now available to the aged from more than 100 insurance companies, including an outline of benefits and premium costs, will be mailed you upon request to: Health Insurance Institute, 488 Madison Ave., New York 22, N. Y.

If it is still pre-retirement for an aging parent or in-law, he or she should find out whether their group health coverage on the job can be converted to an individual policy or continued upon retirement. An increasing number of plans are being written that may be carried into retirement, often

concluded on next page

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with the employer contributing part (or all) of the costs.

Health insurance also is available to people 65 and over, regardless of physical condition, through mass enrollment plans. Enrollment dates are announced by the insurance companies in newspaper and other advertisements at periodic intervals.

Enrollment at all times is open in various organizations existing for other purposes, such as associations of retired teachers, which in addition offer group-type health insurance plans.

Hospital Benefits Vary Among States

Hospital daily room-and-board benefits provided through group health insurance policies issued during 1960, and averaged by state, ranged from a high of $18 to a low of $11, the Health Insurance Institute reported recently.

The benefits provided for miscellaneous hospital services, and the maximum surgical benefits, also varied widely, the Institute said in its report which was based on an analysis of data supplied by insurance companies which account for 68 per cent of the total group health insurance premiums in the United States. The hospital data sampling consisted of 851 basic group coverages issued during 1960 protecting more than 67,000 employees and most of their families.

The average daily room-and-board benefit for all the new coverages was $14, but the average was $11 for the states of Kentucky, Mississippi, North Carolina and Oklahoma and was $18 for the states of New Jersey and Vermont, said the Institute. Similarly, there was a range in provisions for miscellaneous hospital expenses such as X-rays, laboratory charges and operating room charges.

The difference in benefits among states reflects the fact that living costs vary greatly by area, resulting in corresponding levels of hospital rates, the Institute pointed out. It added that a 1960 survey by the American Hospital Association disclosed the average charge for a bed in a two-bed semi-private room was $21.80 in New England, and $14.10 in the South Atlantic states.

The Institute also said that, because benefits are available at whatever level the buyer desires, the range of benefits actually purchased reveals the wide difference in what employer or contract negotiating groups feel is needed to provide adequate health insurance protection.

Surgical benefits provided also had a wide range among the states. The Institute said the maximum benefit purchased for a surgical procedure averaged out to a high of $350 in California, and to a low of $190 in Kentucky. The average for all states was $280, said the HII.

Some of the other states with high average maximum benefits for surgery in the new coverages were South Dakota with $335, Oregon and Washington with $330. Ten other states had $300 or more.

1960 was Big Year for Accidents in U. S.

The year 1960 produced a heavy toll of accidents in the United States with more than 46 million persons being injured, the Health Insurance reported recently.

Because of a high rate of accidents in the last two quarters of 1960, there was a total of 46.4 million persons injured, exceeding by 3.4 million the 43 million persons injured in 1959, said the Institute. For every 1,000 population, there were 263 persons injured in 1960, compared to 249 in 1959.

The report was based on information developed by the household interview program of the U. S. National Health Survey on the number of persons experiencing injuries causing one or more days of restricted activity or requiring medical attention.

For the first six months of the year, 1960 was running behind 1959 in the number of persons injured in accidents, and it appeared possible that the year would end with a smaller total than 1959, just as 1959's total of 43 million persons injured was down from the 1958 figure of 47.1 million.

However, in last year's summer months of July, August and September 14.5 million persons were injured in accidents, compared to the corresponding 1959 summer figure of 12.8 million persons injured. And in the last quarter of 1960, some 11.4 million persons were injured compared to 9.5 million in 1959's final quarter, said the Institute.

Motor Vehicles

There was an increase in persons injured last year in each of the Survey's four categories of accidents—motor vehicle, while at work, home, and all other.

There were five million persons injured in accidents involving motor vehicles in 1960, up from 3.9 million in 1959, which was a decrease from the 1958 figure of 4.3 million. Some 8.7 million persons were injured while on the job, the same number as in 1958, but up from the 1959 figure of 8.3 million persons.

Home continued to be the most dangerous spot, said the Institute. A total of 19 million persons were injured in the home in 1960, an increase over the 1959 total of 18.6 million persons, but down from the 1958 total of 20.2 million persons. All other accidents injured 13.8 million persons last year, compared to 12.2 million in 1959, and 13.9 million in 1958.

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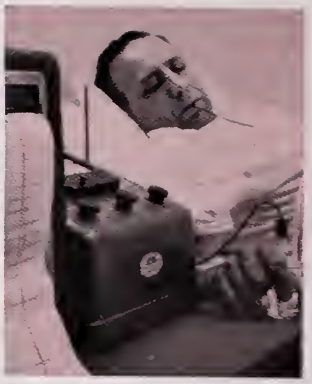
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1. Blank, P., and Boas, H.: Improved analgesia for moderate pain, Ann. West. Med. & Surg. 6:376, 1952. 2. Bonica, J. J., et al.: The management of postpartum pain with dihydrohydroxycodeinone (Percodan): Evaluation with codeine and placebo, West. J. Surg. 65:84, 1957. 3. Cass, L. J., and Frederick, W. S.: A controlled study in pain relief, M. Times 84:1318, 1956. 4. Chasko, W. J.: Pain-free dental surgery: Postoperative extension of the pain-free state, J. District of Columbia Dent. Soc. 31:3, No. 5, 1956. 5. Cozen, L.: Office Orthopedics, ed. 2, Philadelphia, Lea & Febiger, 1953, pp. 120, 138, 145, 156, 234. 6. Nicolson, W. P., Jr., and Skandalakis, J. E.: Control of postoperative pain, J.M.A. Georgia 46:471, 1957. 7. Piper, C. E., and Nicklas, F. W.: Percodan for pain in industrial practice, Indust. Med. 23:510, 1954; abstracted, Clin. Med. 3:1008, 1956, Current M. Digest 22:135, No. 3, 1955.

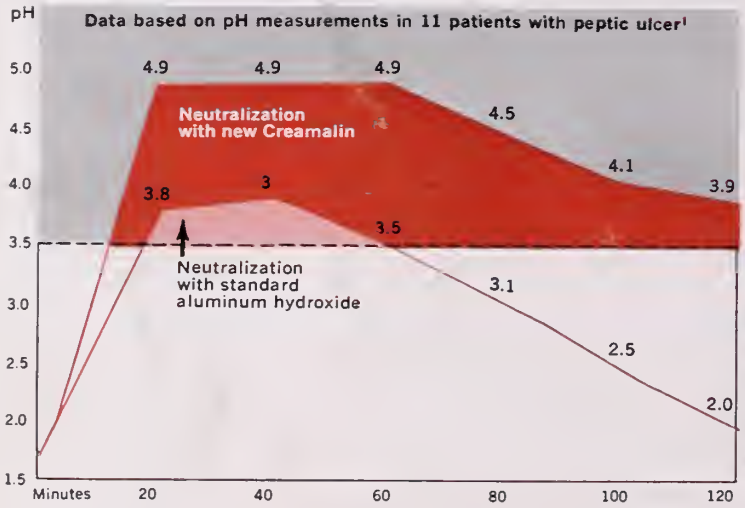
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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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AUGUST, 1961

RHODE ISLAND

Medical Journal

Volume XLIV, No. 8

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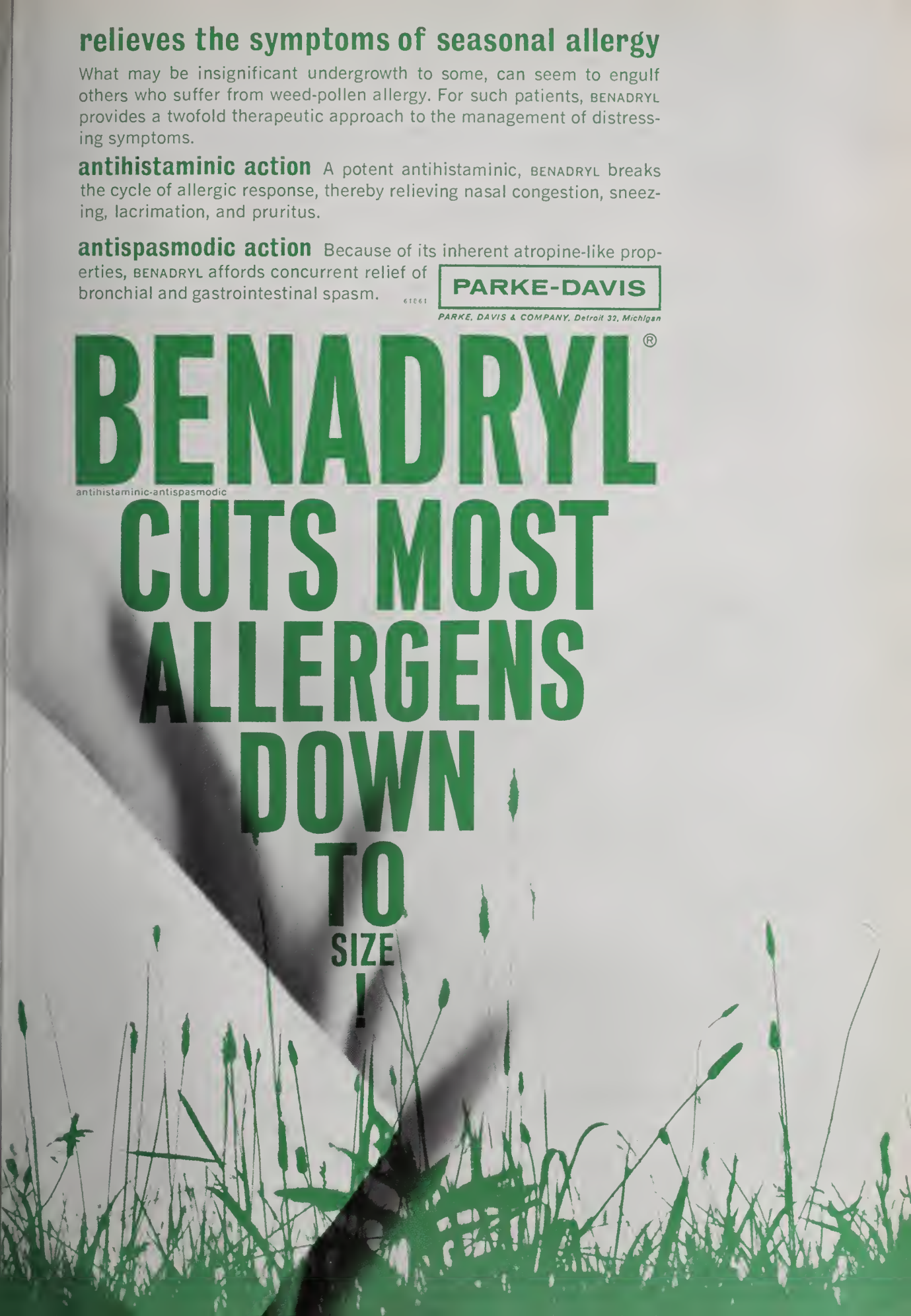
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(Editorial, The *Virginia Medical Monthly*, March 1961, by Benjamin W. Rawles, Jr., M.D.)

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(Editorial, *Journal of the Michigan Medical Society*, June, 1961, G. Thomas McKean, M.D.)

"...If We Can Solve Our Problems..." "No one can doubt that prepaid Medical care is here to stay. It will remain on a voluntary basis if we can solve our problems. It will be here on an involuntary basis if we cannot."

(Dr. Ira C. Layton, Vice President, Kansas City Blue Shield)

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THE PROBLEM OF COMPARATIVE EFFICACY

A documented review of one of the major proposals of the Kefauver-Celler bill now before the Congress

The Kefauver-Celler bill before the Congress has evoked considerable interest and discussion among all who engaged in, or allied to, the healing art. The editors of this Journal will publish from time to time data that they consider of particular merit in analyzing such federal legislation. The documented review prepared by Smith Kline & French Laboratories, reprinted below, is submitted to indicate the threat to the future of medical research and medical practice by such legislative proposals. The editors consider this review worthy of the attention of every member of the Society.

UNDER THE Federal Food, Drug, and Cosmetic Act, drug companies are required to prove to the satisfaction of the Food and Drug Administration that a new drug is *safe* (Section 201 [p] [1] of Act 21 U.S.C.), but there is no present statutory requirement that a new drug be proved *effective*. In administrative practice, however, "safety" and "effectiveness" are inevitably and properly linked together. A drug that is not effective may endanger the health of a patient by failing adequately to treat his ailment; on the other hand some risk of toxicity may be justified if the agent is truly effective in serious disease.

Legislation (Kefauver-Celler Bill, S-1552 and H.R. 6245) has now been proposed to change the wording of the Federal Food, Drug, and Cosmetic Act by adding the words "efficacy" and "efficacious" where the words "safety" and "safe" now appear. On the surface, such a change in the Act would merely legally require drug companies to continue doing what they are actually doing now —that is, to present clinical evidence showing that a drug is safe *and* effective in treating a specific condition. The new provision would not of itself change the current administrative practice of the FDA. On the other hand, it is a well-known fact of government administration that statutory requirements are often extended, by the device of "administrative practice," to require more than the language of a bill specifically stipulates. Just as "safety" has been interpreted to include "efficacy" under the present Act, "efficacy" may be extended to include the concept of "comparative efficacy."

Several critics of the drug industry, during testimony before the Kefauver Subcommittee, have suggested that drug companies be required to prove that a new product is more effective than an already marketed product of the same general type. Other spokesmen in favor of tightening the FDA regulations have complained to the Subcommittee about what they call "duplication" of products. Their implication is that there is something wrong with a competitive drug market. While these critics do not specifically use the words "comparative efficacy," their statements suggest that they would like to see the superior efficacy of a new drug demonstrated before it is approved by the FDA.

The Bill would also amend the patent laws by making it mandatory to prove greater efficacy before a patent is granted for a new product that is a combination of drugs or a molecular modification of an already marketed product. Under this bill, the Commissioner of Patents would be given the power to turn down a patent application unless the manufacturer can prove to the Secretary of Health, Education, and Welfare that a given molecular modification or combination has a significantly greater therapeutic effect than products already on the market.

This proposed change in the Patent Act is a serious threat, not only because it would require manufacturers to prove superior efficacy on a large number of new products before a patent is granted, but also because government officials may use this precedent as a basis for requiring proof of greater efficacy on *all* new pharmaceutical products before they are even introduced. Such a practice would often block the development of a useful new drug because it would necessitate proof to a government body that the new agent was demonstrably superior to all products already on the market.

The Problem of Proof

Here are two instances which demonstrate the difficulties which stand in the way of proving superior efficacy, difficulties so great as to demonstrate the impracticability of the concept:

1. *Preparations to be used for the collagen diseases, especially rheumatoid arthritis and possibly rheumatic fever.* The problem of comparative efficacy becomes difficult to solve because of the ambiguity about the yardsticks to be used in measur-

continued on page 438

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Riboflavin, mg.	0.6	50	Sadium, Gm.	0.2
Niacinamide, mg.	5	50	Potassium, Gm.	0.9
Calcium, Gm.	0.5	67	Copper, mg.	0.5
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references: (1) Nelson, W. E.: Textbook of Pediatrics, ed. 7, Philadelphia, W. B. Saunders Company, pp. 231-233, 1959. (2) Parrott, R. H., and Nelson, W. E.: *ibid.*, p. 759. (3) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (4) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (5) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960.

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THE PROBLEM OF COMPARATIVE EFFICACY

continued from page 436

ing whether a given drug has really affected the course of the disease. Not only is there a problem in differentiating between various steroids, but in the minds of many rheumatologists salicylates are actually preferred to steroids for chronic therapy. The value of gold in arthritis has only been demonstrated after many years of study by medical bodies.

2. Preparations to be used for the treatment of mental and emotional diseases. Evaluation—even diagnosis—of these conditions is frequently more of an art than a science, and presupposes a long-term knowledge of the patient. A determination of comparative efficacy in these conditions, as in the case of the collagen diseases, requires some general agreement as to the yardsticks for measuring improvement in the patient's condition. Such general agreement is hard to find. (There are, for example, the analytical, biological and environmental theories of mental illness, all of which present different theories as to the cause of the disease and different criteria for measuring improvement.)

These examples suggest that requiring drug companies with new products to prove greater therapeutic effect would discourage them from developing products with similar therapeutic action to those already on the market, even though the new products (when sufficient clinical data had been gathered) might well prove to be therapeutic improvements. Also, it would set up the Food and Drug Administration as the final arbiter in determining whether a difference in therapeutic action would or would not, in the long run, be a significant medical advance. As medical history demonstrates, this is a dangerous principle.

The History of Medical Judgment

The history of medicine is a history of trial and error. It is, moreover, a history in which the exercise of medical judgment has been shown as inevitably imperfect. It is often difficult, and sometimes impossible, for any group of experts, however well qualified, to generalize as to which of two or more drugs or medical procedures will work best in a given situation.

This point is made in an editorial titled *Omniscience or Judgment* appearing in the MEDICAL TRIBUNE (February 6, 1961):

> Now, a further question is raised concerning therapeutic effectiveness—and some have suggested that it might possibly be a good scheme to have a regulatory body pass upon effectiveness, too. We become disturbed and would consider it an awesome responsibility. It would have to be presumed that such people are omniscient.

The history of medicine is full of instances where expert opinion failed to recognize the value of a drug or procedure when it was first advocated.

Leading authorities of the time refused to listen to Jenner when he advocated smallpox vaccine. They were dubious about Lister's theory of antisepsis. They opposed Pasteur's vaccine for anthrax. Semmelweis was mercilessly attacked by medical experts for his theory on the cause of childbed fever.

Digitalis, for example, has a history that shows how medical opinion can change. Originally used as a diuretic, it was later demonstrated to have an action on the heart and its diuretic effect was challenged. After 150 years, medical opinion now agrees that the drug does have a direct effect on the kidney as well as on the heart. Moreover, there was difference of opinion about the proper use of digitalis in heart disease, some authorities maintaining that it was only valuable in cases where an abnormal heart rhythm was present. The consensus of medical opinion today is that digitalis is applicable to the treatment of heart failure whether or not the patient has an abnormal heart rhythm.

Cod liver oil was at first thought to be valueless, in spite of Mellanby's studies in 1919 showing that experimental rickets could be prevented with the

continued on page 440





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THE PROBLEM OF COMPARATIVE EFFICACY

continued from page 438

oil. Medical authorities held generally that it had no value other than its caloric content.

It may be said that this is all past history and that things are different today. But conflicts of medical opinion exist now about a number of matters, such as the value of anticoagulants in the treatment of uncomplicated myocardial infarction, the use of glucose in the treatment of diabetic acidosis, the value of gold in the management of arthritis and the utility of BCG vaccine for the prevention of tuberculosis.

A dramatic example of how medical judgment can change is given in the Second Edition of *The Pharmacological Basis of Therapeutics*,* a standard reference work. The first edition was published in 1940; the second in 1955. Under the *Veratrum Alkaloids*, we find this remark in the first edition: "The drug is practically obsolete today and enjoys a deserved oblivion."

The second edition states:

> From time to time, a once-obsolete drug is exhumed, dusted off, and re-examined in the laboratory and clinic by modern investigative technics for its potential therapeutic usefulness. This development characterizes the research on veratrum, a drug described in the first edition of this textbook as enjoying a clinical status of "deserved oblivion."

In contrast to "oblivion," medical science has put the veratrum alkaloids to a number of important uses during the fifteen years between the two editions of this textbook. The authors report:

> Veratrum preparations are employed for their antihypertensive action in clinical conditions associated with elevated blood pressure, such as essential and malignant hypertensive disease, toxemia of pregnancy, and certain nephropathies (acute and chronic glomerulonephritis, pyelonephritis). In addition, veratrum alkaloids are used as important investigative tools in the physiological and pharmacological laboratory.

It is essential that the public be protected against inferior drugs, but when all is said and done the only sure method of establishing *comparative efficacy* is to introduce a drug into clinical practice and subject it to the truly definitive test: How will it be used by physicians in the daily practice of medicine? If a product is demonstrably safe and effective, the question of comparative efficacy should be resolved by the physician, who is the legally responsible agent in selecting drugs for his patient.

Trial-by-usage has another and desirable effect: In use it may be found that a drug given for one indication is appropriate in another. This is well stated by Doctor Walter Modell, in *Drugs of Choice:*

> Many drugs have more than one action and more than one sphere of clinical application. In each of these, the same drug may be relatively more or less effective, more or less dangerous, more or less important . . . relative utility may vary with the clinical application. . . . As in the case of the phenothiazine compounds which were recently introduced only for their antihistamine action, new therapeutic uses are being continually proposed.

Several drugs originally introduced for the treatment of one condition have been found useful in treating another. After wide usage by physicians, cortisone (originally considered of potential value in the treatment of Addison's disease) was found useful in the management of many clinical problems. Probenecid, introduced to prolong blood concentrations of penicillin, was discovered to be effective in treating gout and chronic gouty arthritis; the amphetamines, introduced for the treatment of narcolepsy, were subsequently found of value in curbing appetite and elevating mood, and some of the antihistamines have been found to have an antiemetic effect.

A final argument for trial-by-usage is this: Drugs differ in their effects on different patients, which means that a drug that is more effective with one patient may be less effective with another. In a clinical trial of four tranquilizing drugs, Leitch and Seager* found that each drug had approximately the same proportion of poor, moderate and good results in each diagnostic group. These results suggest that the physician must continue his search until he finds the drug most satisfactory for each individual patient.

During the Senate hearings, Doctor Henry Brill, deputy commissioner of Hygiene for the State of New York, said that his experience proved the same point:

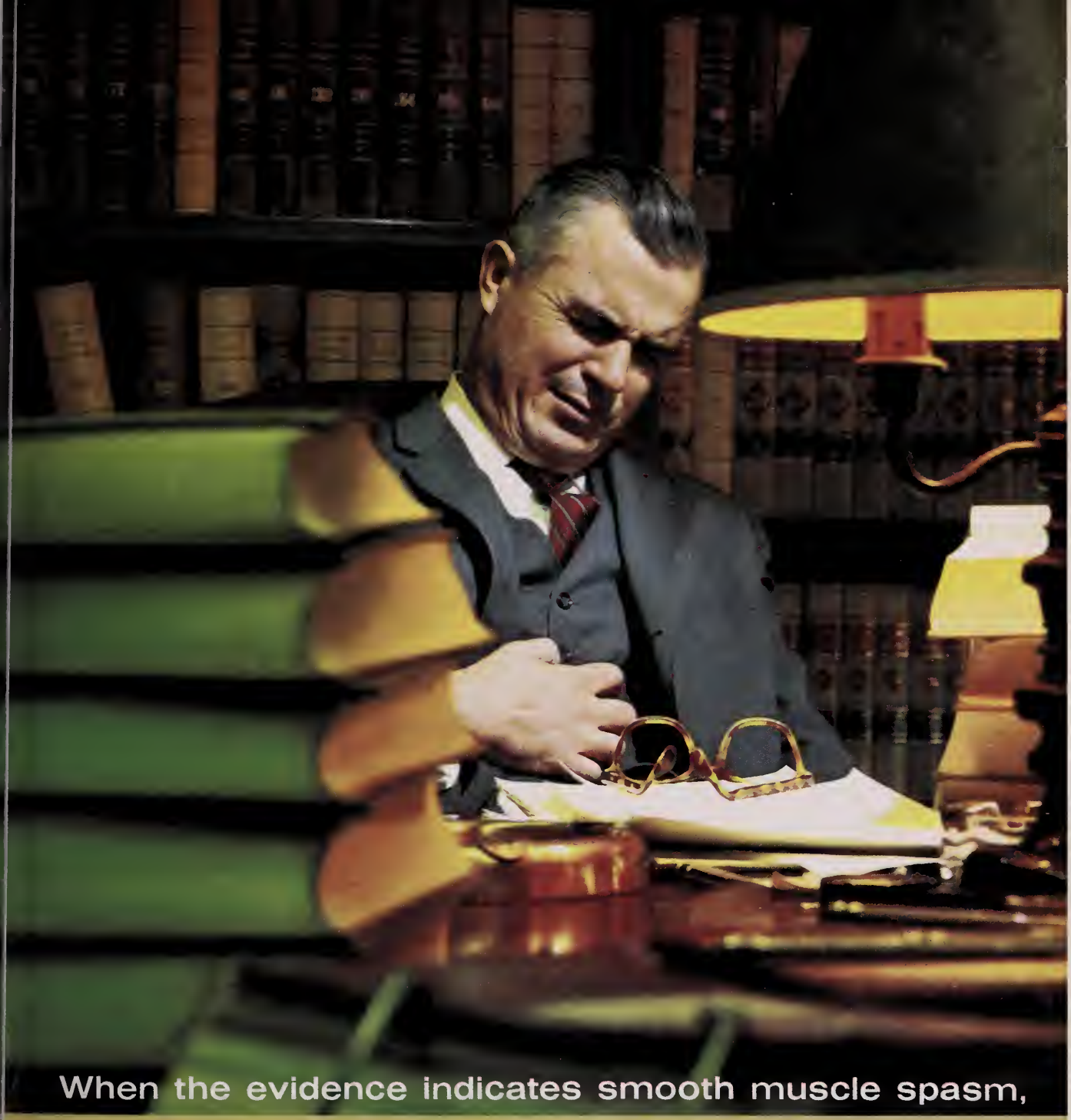
> It may appear in the thick of things that we have too many drugs and that perhaps we ought to restrict ourselves to a few. . . . I believe that this would be wrong. . . . It seems here that perhaps what we need is some willingness to experiment with new types of products, with new types of molecules, but not to abandon the pharmacological approach.

A similar situation is true with the hypotensive agents, where it is generally recognized that one patient may respond to Drug A, another to Drug B and a third only to combination therapy.

*By Louis S. Goodman, M.D. and Alfred Gilman, Ph.D., New York, 1956.

*Journal of Mental Science, 106:1093-1098, July, 1960.

concluded on page 443



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REFERENCES: 1. Carpenter, E. B.: Southern M.J. 51:627, 1958. 2. Forsyth, H. F., J.A.M.A. 167:163, 1958. 3. Hudgins, A. P.: Clin. Med. 6:2321, 1959. 4. Grisolia, A., and Thomson, J. E. M.: Clin. Orthopaedics 13:299, 1959. 5. Lewis, W. B.: California Med. 90:26, 1959. 6. O'Doherty, D. S., and Shields, C. D.: J.A.M.A. 167:160, 1958. 7. Park, H. W.: J.A.M.A. 167:168, 1958. 8. Plumb, C. S.: Journal-Lancet 78:531, 1958. 9. Poppen, J. L., and Flanagan, M. E.: J.A.M.A. 171:298, 1959. 10. Schaubel, H. J.: Orthopedics 1:274, 1959.

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BOOK REVIEWS

THE OFFICE ASSISTANT IN MEDICAL PRACTICE by Portia M. Frederick and Carol Towner. W. B. Saunders Company, Phil., 1960. $5.25

The assistant in a medical office working as receptionist, bookkeeper, and technician must possess a variety of skills in order to handle each task satisfactorily. This book is divided into two major sections. The first section concentrates upon the business and secretarial aspects; the second section presents the medical aspects of office assisting. Office forms, types of equipment, and procedures with which every assistant should be familiar have been amply illustrated.

Many examples of good office generalship are recorded. In receiving patients in the office the authors remind one to remember names and remember something personal of each, such as hobbies or family. It is suggested that a good telephone voice has a natural and well-modulated tone, an unhurried quality, and pleasant and clear diction. Billing and collections procedures are discussed. There are hints on tracing patients who skip and leave no forwarding address. Illustrations of surgical instruments and the proper use of medication and injections are detailed and simple.

This book will aid the medical assistant in performing her duties to the doctor and to the public which they serve.

PETER L. MATHIEU, JR., M.D.

CURRENT THERAPY—1961. Edited by Howard F. Conn, M.D. W. B. Saunders Co., Phil., 1961. $12.50

This newest edition is the thirteenth in the series, and the arrangement is the same as in previous years. It is stated in the preface that of the 307 articles in the book 82 per cent are new, and many of the others have been extensively revised. Purely surgical conditions such as appendicitis and inguinal hernia are not dealt with, pediatric problems are omitted unless they occur in other ages as well, and ophthalmology is not included. With these exceptions, however, the general practitioner or specialist can count on finding here advice in the treatment of any disease he is likely to meet.

The task of reviewing such a book, which contains 806 pages of highly concentrated information, is somewhat like attempting to abbreviate a four-year medical course into six easy lessons. Everyone, however, has one or two subjects in which he feels more competent than in others, and can compare the facts given in the book with his own knowledge. Judged in this way this reviewer found the sections on some of the infectious diseases and the pneumonias well covered and adequate. There is sometimes the welcome inclusion of some quite recent information of more theoretical interest, as in the discussion of Eaton's agent in the etiology of virus pneumonia.

But it is probably not the function of this volume to supply stimulating reading for a specialist in his own particular field. Rather it is useful in supplying authoritative information for prompt use by the hard-pressed doctor, perhaps concerning a disease state with which he is not too familiar. It serves also as a check-list, so that reading through the two or three pages devoted to the treatment of a disease he can be reminded of all the possibilities of therapy and reassure himself that nothing has been overlooked. Used in this fashion these yearly editions of this popular book will be welcomed by the practicing physician because of its ready aid in his daily work.

MORGAN CUTTS, M.D.

MEDICAL, SURGICAL, AND GYNECOLOGICAL COMPLICATIONS OF PREGNANCY by the Staff of the Mount Sinai Hospital. Edited by Alan F. Guttmacher, M.D. and Joseph J. Rovinsky, M.D. The Williams and Wilkins Co., Baltimore, 1960. $16.50

It has been customary for books on the complications of pregnancy to be written by obstetricians, for the most part. With this volume there has been introduced a decided departure. A corps of able specialists has been called upon to write of their experience in handling the medical, surgical and gynecological complications of pregnancy. They have done an extremely convincing job.

Founded in 1952, the Obstetrical Service of the Mount Sinai Hospital in New York City refers its complications to special clinics manned by non-obstetric specialists. This accumulated experience,

grafted on specialized knowledge and skills, has produced an impressive volume.

Divided into fourteen sections by body systems or disease groupings, the subject matter ranges from hematologic diseases through collagen disorders to genetic considerations. There are excellent chapters on heart disease, tuberculosis and neoplasms, to name a few. The bibliography at the end of each chapter is carefully selected and limited to significant papers.

CHARLES POTTER, M.D.

THE PROBLEM OF COMPARATIVE EFFICACY

concluded from page 440

So in the final analysis, are there some areas of medical judgment where the only proper test is *usage?*

Truth in therapeutics is not a changeless and immutable fact like the 2 + 2 makes 4 of arithmetic. Medicine is a developing, rapidly developing science. It can only continue to develop if differences of medical opinion are given time and opportunity to work themselves out.

Perhaps we should fear the same results from another form of authoritarianism, that of the government. It might be wise to put greater faith in what someone has called, "the consensus of present day medical opinion." If a drug cannot be put on the market until a board of experts has passed on its comparative efficacy, a real stumbling block will be put in the way of medical progress.

BIBLIOGRAPHY

Brill, Henry, M.D.: Testimony before Senate Subcommittee on Antitrust and Monopoly. January 22, 1960

Castiglioni, Arturo: *A History of Medicine*, edited by E. B. Krumbhaar. Second Edition. Knopf. New York. 1947

Dubos, René: *Mirage of Health*. Harper & Brothers. New York. 1959

Eiseley, Loren C.: *The Firmament of Time*. The Atheneum. New York. 1960

Garrison, Fielding H.: *An Introduction to the History of Medicine*. Saunders & Company. Philadelphia and London. Fourth Edition. 1929

Goodman, Louis S., and Gilman, A.: *The Pharmacological Basis of Therapeutics*. First Edition. Macmillan Company. 1941

Goodman, Louis S. and Gilman, A.: *The Pharmacological Basis of Therapeutics*. Second Edition. Macmillan Company. 1955

Leitch, A., and Seager, C. P.: *A Clinical Trial of Four Tranquilizing Drugs*. Journal of Mental Science. 106:1093-1098. July, 1960

Modell, Walter: *Drugs of Choice*. C. V. Mosby Company. St. Louis. 1958

"Omniscience and Judgment": *Medical Tribune*. Vol. 2, No. 6. February 6, 1961

Shryock, Richard H.: *The Development of Modern Medicine*. Alfred A. Knopf. New York. 1947

Withering, William: *An Account of the Foxglove and Some of Its Medical Uses: with Practical Remarks on Dropsy and Other Diseases*. 1785

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SUSCEPTIBILITY TO CORONARY HEART: SERUM CHOLESTEROL

Despite some confusion as to the importance of serum cholesterol, the significance of this risk factor in the development of CHD (coronary heart disease) has been well established. Although the pathogenesis of the atherosclerotic lesion is not clearly understood, it has been recognized for many years that the principal constituent of the atherosclerotic plaque is cholesterol. Such knowledge has led to conjecture as to the mechanism for the deposition of cholesterol in these lesions. Many factors have been shown to influence the level of cholesterol in the serum: emotional stress, dietary constituents, physical activity, and various hormones, among others. Unfortunately, uncertainty concerning the mechanism responsible for the elevation of the serum cholesterol level has sometimes obscured its importance as a predictor of the development of CHD. However, . . . in addition to the well-recognized importance of age and sex, the level of serum cholesterol stands out as the most significant.

Framingham data indicate that the average serum cholesterol level in adult males of a New England population is about 220 mg. per cent, with less than 5 per cent of the population having cholesterol levels below 160 mg. per cent and slightly more than 5 per cent having serum cholesterol levels over 280 mg. per cent. The serum cholesterol level in adult males does not appear to be an age-related characteristic; very little rise in average cholesterol level is observed in men between age 30 and 60. In adult women, on the other hand, the serum cholesterol level appears to be distinctly age-related, rising from an average of approximately 195 mg. per cent, for those age 30, to a peak of 250 mg. per cent, at age 60.

There is convincing evidence that serum cholesterol levels are definitely related, both to the presence of, and the development of, CHD. . . . Clinical studies have shown that the average serum cholesterol levels of persons who have developed CHD are definitely higher than in controls free of CHD. This demonstrates that there is a definite association between the elevated serum cholesterol level and existing CHD. It remained for the prospective studies of populations to demonstrate a relationship between pre-existing elevation of serum cholesterol and the subsequent development of CHD. From these studies, it is perfectly clear that when populations are divided into groups, according to levels of serum cholesterol, the incidence of newly developing CHD is observed to increase with each increment of cholesterol level. An example of the relative increase of risk in CHD associated with this characteristic is provided by the Framingham data. At the end of eight years of observation in men with serum cholesterol levels below 200 mg. per cent, the rate was less than half that of the total population, while in the group with cholesterol levels of 260 mg. per cent, and higher, the rate was almost twice that of the total population, a total increase of fourfold. Similar results have been demonstrated in the other studies in Albany, Los Angeles, and Minnesota.

It is important to recognize that in the United States population, there is no level of serum cholesterol which can be called "normal" in the sense that such a level implies absence of risk of CHD. There is no level at which the risk takes a sudden rise. However, all other factors being equal, the lower the serum cholesterol, the lower the risk. . . . Since in the Framingham population there are few persons with serum cholesterol levels below 150 mg. per cent, it is not possible to determine the relative risk of persons with the "lowest levels" as observed in the U.S.A., i.e., persons who would be much nearer the average in other populations believed to have low CHD rates. It is likely that if it were possible to compare persons with cholesterol levels low by all population standards, e.g., less than 130, with those who have significantly higher levels, e.g., above 300, the risk would be far in excess of the fourfold increase demonstrated by a rise from 200 to 260, and over. It should therefore be clear that it is not appropriate to think of serum cholesterol levels as "normal" or "abnormal," since there is a steady rise of CHD incidence with increasing levels of serum cholesterol from low to high.

Consideration of whether action should be taken with regard to a given cholesterol level must be based on an appraisal of all other possible risk factors in addition to serum cholesterol *per se*. The risk associated with elevation of the serum cholesterol level appears to be greater for men than for women. Thus the increased risk associated with a rise in serum cholesterol from below 200 to 260, or over, in women is very slight, although further observation is needed to clarify this more exactly.

The relative risk associated with progressive elevation of the serum cholesterol level appears to decrease with advancing age. The significance of elevated cholesterol levels in younger persons is thus enhanced. Age and sex are therefore important factors to be considered in determining what action, if any, is indicated in persons with a given cholesterol level. Blood pressure level . . . is also of great importance in making this decision.

It must be recognized that if the cholesterol level is lowered by diet or drug therapy, it does not necessarily follow that the decreased risk of developing CHD accruing to persons with naturally occurring low cholesterol levels is automatically acquired. . . . Meanwhile, it seems reasonable to advocate measures which produce lowered serum cholesterol levels, especially in individuals considered highly susceptible to CHD on the basis of an evaluation of all the risk factors.

MODERN CONCEPTS OF CARDIOVASCULAR DISEASE, July, 1961, Thomas R. Dawber, M.D. and William B. Kannel, M.D.

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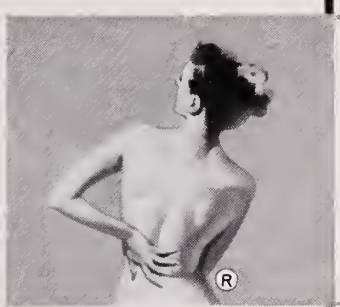
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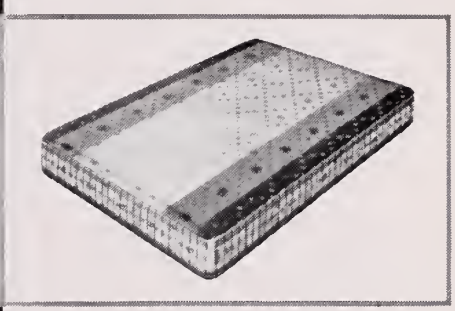
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We acknowledge the receipt of the following books and thank the publishers for sending them. Some of these volumes will be reviewed from time to time. We shall be happy to furnish our readers with additional information on all books included on this list.

MEMOIRS OF A MEDICO by E. Martinez Alonso, M.D. 335 pp. $4.50. Doubleday & Co., Inc., Garden City, N.Y. 1961.

INSTRUCTIONAL COURSE LECTURES — 1960 of the American Academy of Orthopaedic Surgeons. Edited by Fred C. Reynolds, M.D., St. Louis. Written by 32 Contributors. Vol. XVII. 421 pp. illus. $18.50. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3.

NEW AND NONOFFICIAL DRUGS. An Annual Compilation of Available Information on Drugs, Including Their Therapeutic, Prophylactic and Diagnostic Status, as Evaluated by the Council on Drugs of the American Medical Association, 1961. 849 pp. $4.00. J. B. Lippincott Co., East Washington Sq., Philadelphia 5. 1961.

PHARMACOLOGY: NATURE, ACTION, USE OF DRUGS by Harry Beckman, M.D., Chairman, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; Consulting Physician, Milwaukee County General Hospital and Columbia Hospital; Editor, Year Book of Drug Therapy. 805 pp. illus. $15.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

THE GENTLE LEGIONS by Richard Carter. 335 pp. $4.50. Doubleday & Co., Inc., Garden City, N.Y. 1961.

ESSENTIAL HYPERTENSION. An International Symposium, Berne, June 7th-10th, 1960. Sponsored by CIBA. Chairman, F. C. Reubi, Berne. Edited by K. D. Bock, Basle & P. T. Cottier, Berne. 392 pp. illus. DM 33.80. Springer-Verlag, Heidelberger Platz 3, (1) Berlin-Wilmersdorf (West Berlin) Germany. 1960.

REGULATION OF THE INORGANIC ION CONTENT OF CELLS. In honour of Prof. E. J. Conway. Editors for Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P. & Cecilia M. O'Connor, B.SC. Ciba Foundation Study Group No. 5. 100 pp. illus. $2.50. Little, Brown & Co., 34 Beacon St., Boston 6. 1960.

METABOLIC EFFECTS OF ADRENAL HORMONES in Honour of Prof. G. W. Thorn. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P. & Maeve O'Connor, B.A. Ciba Foundation Study Group No. 6. 109 pp. illus. $2.50. Little, Brown & Co., 34 Beacon St., Boston 6. 1961.

CIBA FOUNDATION SYMPOSIUM JOINTLY WITH COMMITTEE FOR SYMPOSIA ON DRUG ACTION ON ADRENERGIC MECHANISMS. Editor for British Pharmacological Society: J. R. Vane, B.SC., D.PHIL. Editors for Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B. & Maeve O'Connor, B.A. 632 pp. illus. $12.50. Little, Brown & Co., 34 Beacon St., Boston 6. 1961.

CIBA FOUNDATION SYMPOSIUM ON HAEMOPOIESIS: Cell Production and its Regulation. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B. & Maeve O'Connor, B.A. 490 pp. illus. $11.00. Little, Brown & Co., 34 Beacon St., Boston 6. 1960.

CURRENT THERAPY—1961: Latest Approved Methods of Treatment for the Practicing Physician. Edited by Howard F. Conn, M.D. Consulting editors: George E. Burch et al. 806 pp. $12.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

TEXTBOOK OF MEDICINE. By various Authors. Edited by Sir John Conybeare, K.B.E., M.D., D.M. & W. N. Mann, M.D., F.R.C.P. 13th ed. 989 pp. illus. $10.00. Williams & Wilkins Co., 428 E. Preston St., Baltimore 2, Md.; E. & S. Livingstone, Ltd., 15-17 Teviot Pl., Edinburgh 1, Scotland. 1961.

CEREBRAL PALSY AND RELATED DISORDERS: A Developmental Approach to Dysfunction by Eric Denhoff, M.D., Medical Director, Meeting Street School Children's Rehabilitation Center, Providence, R.I. and Isabel Pick Robinault, PH.D., Director, Professional Education, Institute for Crippled and Disabled, New York City. 421 pp. illus. $12.00. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36, N.Y. 1960.

THE SENESCENT IN INDUSTRY by George C. Dowd, M.D., Chairman, National Industrial Advisory Committee, American Geriatrics Society. American Geriatrics Society, 1960.

INFORMATION, PLEASE! FOR WOMEN ONLY Incorporating the Dunhill Chart by Alfred Dreyfus II. 556 pp. illus. $7.50. Vantage Press, Inc., 120 West 31st St., New York 1. 1961.

MIRAGE OF HEALTH. Utopias, Progress, and Biological Change by Rene Dubos. 235 pp. 95¢. Anchor Books. Doubleday & Co., Inc., Garden City, N.Y. 1961. (publ. originally by Harper & Brothers, N.Y., 1959.)

HEREDITY IN OPHTHALMOLOGY by Jules Francois, Professor of Ophthalmology at the University of Ghent, Belgium; Member of the Academy of Medicine. Translated from the French edition. 731 pp. illus. $23.00. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1961.

BELOVED PROFESSOR. Life and Times of William Dodge Frost by Russell E. Frost. 350 pp. illus. $3.75. Vantage Press, Inc., 120 West 31st St., New York 1. 1961.

LOSE WEIGHT AND LIVE by Robert P. Goldman. With illustrations by Roland Rodegast. 235 pp. illus. $3.95. Doubleday & Co., Inc., Garden City, N.Y. 1961.

MEDICAL PHARMACOLOGY. Principles and Concepts by Andres Goth, M.D., Professor of Pharmacology and Chairman of the Department, University of Texas Southwestern Medical School. 551 pp. illus. $11.00. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1961.

THE CHANGING YEARS: THE MENOPAUSE WITHOUT FEAR by Madeline Gray. 273 pp. 95¢. Dolphin Book. Doubleday & Co., Inc., Garden City, N.Y. 1961. (1st edition, 1951, reviewed March 1952.)

Key and Conwell's MANAGEMENT OF FRACTURES, DISLOCATIONS, AND SPRAINS by H. Earle Conwell, M.D., F.A.C.S., Associate Professor of Orthopedic Surgery, University of Alabama School of Medicine, Birmingham; and Fred C. Reynolds, M.D., Professor of Orthopedic Surgery, Washington University School of Medicine, St. Louis. 7th ed. 1153 pp. illus. $27.00. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1961.

CHILDBIRTH WITH HYPNOSIS by William S. Kroger, M.D. Edited by Jules Steinberg. 216 pp. illus. $3.95. Doubleday & Co., Inc., Garden City, N.Y. 1961.

THE HUMAN FRAME by Giovanna Lawford. With a foreword by Dr. Margaret Mead. 109 pp. illus. 95¢. Anchor Books. Doubleday & Co., Inc., Garden City, N.Y. 1961.

THE GOLDEN AGE COOKBOOK by Phyllis MacDonald. Drawings by Margot Tomes. 192 pp. illus. $2.95. Doubleday & Co., Inc., Garden City, N.Y. 1961.

THE HAND. A Manual and Atlas for the General Surgeon by Henry C. Marble, M.D., F.A.C.S.,

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Consulting Surgeon to the Massachusetts General Hospital. Illustrations by Mildred Codding. 207 pp. illus. $7.00. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1960.

THE MEDICAL DEPARTMENT: HOSPITALIZATION AND EVACUATION, ZONE OF INTERIOR by Clarence McKittrick Smith. United States Army in World War II. The Technical Services. Office of the Chief of Military History, Department of the Army, Washington, D.C. 503 pp. illus. $4.00. U.S. Government Printing Office, Washington 25. 1956.

THE PHYSIOLOGIC EFFECTS OF WOUNDS by the Board for the Study of the Severely Wounded, North African-Mediterranean Theater of Operations. Medical Department, United States Army, Surgery in World War II. Office of the Surgeon General, Department of the Army, Washington, D.C. 376 pp. illus. $3.50. U.S. Government Printing Office, Washington 25. 1952.

LIGHT COAGULATION by Gerd Meyer-Schwickerath, M.D., Chief, Municipal Eye Clinic, Essen; Professor of Ophthalmology, University of Bonn. Translated by Stephen M. Drance, M.D., F.R.C.S. (Eng.), Associate Professor of Ophthalmology, University of Saskatchewan, Saskatoon, Canada. 114 pp. illus. $9.50. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1960.

MEDICAL ALMANAC 1961-62: A Compilation of General Information, Statistics and Other Data Relating to Medical Care, Medical Education, Medical Organization and Literature, Incidence of Illness and Economic Aspects of Medical Practice. Compiled by Peter S. Nagan, A.B., M.A., M.S. 528 pp. $5.00. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

THE CLINICAL APPRENTICE. A Handbook of Bedside Methods by John M. Naish, M.D., F.R.C.P. & John Apley, M.D., F.R.C.P. 2nd ed. 199 pp. illus. $3.50. John Wright & Sons, Ltd., The Stonebridge Press, Bristol, Eng. 1960; Williams & Wilkins Co., 428 East Preston St., Baltimore 2.

NATIONAL LIBRARY OF MEDICINE INDEX MECHANIZATION PROJECT. July 1, 1958-June 30, 1960. Bulletin of the Medical Library Association, Vol. 49, No. 1, pt. 2, January 1961.

ADVENTURE TO MOTHERHOOD: THE PICTURE-STORY OF PREGNANCY AND CHILDBIRTH by J. Allan Offen, M.D., Assistant Professor of Obstetrics and Gynecology, University of Miami School of Medicine, Miami, Florida. $2.95. Audio Visual Education Co. of America, Inc., P.O. Box 52-6, Miami 52; distributed by



Taplinger Publishing Co., Inc., 119 W. 57th St., New York 19. 1960.

CARDIO-VASCULAR SURGERY. A Manual for Nurses by Members of the Surgical Staff and Members of the Nursing Service Staff, the Methodist Hospital, Texas Medical Center, Houston. Edited by George H. Peddie, M.D., Surgical Staff & Frances E. Brush, R.N., Director of Nursing. 170 pp. illus. $2.75. G. P. Putnam's Sons, 200 Madison Ave., New York 16. 1961.

THE CARDIAC ARRHYTHMIAS. A Guide for the General Practitioner by Brendan Phibbs, M.D., Casper Clinic, Casper, Wyoming. 128 pp. illus. $7.50. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1961.

A MANUAL OF CUTANEOUS MEDICINE by Donald M. Pillsbury, M.A., D.SC., M.D., Professor and Chairman of Department of Dermatology, University of Pennsylvania School of Medicine, Philadelphia; Walter B. Shelley, M.D., PH.D., F.A.C.P., Professor of Dermatology, University of Pennsylvania School of Medicine, and Albert M. Kligman, M.D., PH.D., Professor of Dermatology, University of Pennsylvania School of Medicine. 430 pp. illus. $9.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

PROGRESS IN THE TREATMENT OF FRACTURES AND DISLOCATIONS. 1950-1960. By Thomas B. Quigley, M.D., Assistant Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital, and Henry Banks, M.D., Clinical Associate in Orthopedic Surgery, Harvard Medical School; Associate in Orthopedic Surgery, Peter Bent Brigham Hospital. Reprinted from the New England Journal of Medicine, vol. 263, 1960. 102 pp. $2.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1960.

THE HOUSE OF HEALING. The Story of the Hospital by Mary Risley. 288 pp. illus. $4.50. Doubleday & Co., Inc., Garden City, N.Y. 1961.

STROKE. A STUDY OF RECOVERY by Douglas Ritchie. 192 pp. $3.50. Doubleday & Co., Inc., Garden City, N.Y. 1961.

HELP-BRINGERS. VERSATILE PHYSICIANS OF NEW JERSEY by Fred D. Rogers, M.D., Temple University School of Medicine, Philadelphia. Foreword by Henry A. Davidson, M.D., Editor, Journal of the Medical Society of New Jersey. 125 pp. illus. $2.95. Vantage Press, Inc., 120 West 31st St., New York 1. 1960.

RESPIRATION. PHYSIOLOGIC PRINCIPLES AND THEIR CLINICAL APPLICATIONS by P. H. Rossier, A. A. Bühlmann and K. Wiesinger. Edited and translated from the

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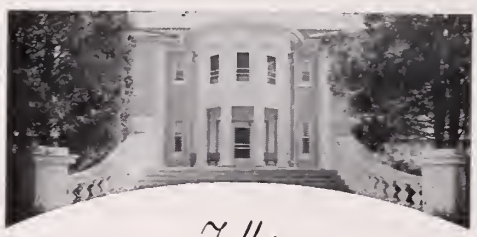
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THE FAMILY HANDBOOK OF HOME NURSING AND MEDICAL CARE by I. J. Rossman, M.D., PH.D., Chief of Professional Services, Home Care Department, Montefiore Hospital, New York and Doris R. Schwartz, R.N., Assistant Professor in Outpatient Nursing, Cornell University-New York Hospital School of Nursing, New York. 519 pp. illus. $1.45. Dolphin Reference Book. Doubleday & Co., Inc., Garden City, N.Y., publ. originally by Random House, Inc., 1958.

CARDIOVASCULAR DYNAMICS by Robert F. Rushmer, M.D., Professor of Physiology and Biophysics, University of Washington Medical School. 2nd ed. 500 pp. illus. $12.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

HANDBOOK OF PEDIATRICS by Henry K. Silver, M.D., Professor of Pediatrics, University of Colorado School of Medicine, Denver; C. Henry Kempe, M.D., Professor of Pediatrics, Head, Department of Pediatrics, University of Colorado School of Medicine & Henry B. Bruyn, M.D., Associate Professor of Pediatrics and Medicine, University of California School of Medicine, San Francisco. 4th ed. 574 pp. $3.50. Lange Medical Publications, Los Altos, Calif. 1961.

A SYNOPSIS OF CONTEMPORARY PSYCHIATRY by George A. Ulett, B.A., M.S., PH.D., Professor of Psychiatry, Department of Psychiatry and Neurology, Washington University School of Medicine, St. Louis & D. Wells Goodrich, M.D., Chief, Biosocial Growth Center, National Institute of Mental Health, Bethesda, Md. 2nd ed. 309 pp. $6.50. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1960.

CLINICAL DISTURBANCES OF RENAL FUNCTION by Abraham G. White, M.D., F.A.C.P., Associate Visiting Physician and Chief of the Renal Disease Clinic, Queens Hospital Center, Jamaica, N.Y. 468 pp. illus. $10.50. W. B. Saunders Co., West Washington Sq., Philadelphia 5. 1961.

ATLAS OF OBSTETRIC TECHNIC by J. Robert Willson, M.D., M.S., Professor of Obstetrics and Gynecology, Temple University School of Medicine, Philadelphia. Illustrated by Daisy Stilwell. Deluxe ed. 304 pp. illus. $14.50. The C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3. 1961.

HANDBOOK OF SURGERY. Edited by John L. Wilson, M.D. & J. J. McDonald, M.D. 644 pp. illus. $4.00. Lange Medical Publications, Los Altos, Calif. 1960.

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The Tenth Arthur Hiler Ruggles Oration . . .

ACTION FOR MENTAL HEALTH*

WALTER E. BARTON, M.D.

The Author, *Walter E. Barton, M.D., of Boston, Massachusetts. Superintendent, Boston State Hospital; Associate Professor of Psychiatry, Boston University School of Medicine.*

IT IS FITTING that once each year in this community there be a pause to honor the memory of Arthur Ruggles, one of the truly great leaders in psychiatry. The Butler Hospital was his proudest achievement. Moreover, his leadership extended to the national scene, where he was a militant fighter for the betterment of treatment programs for the mentally ill throughout the United States.

Butler is no longer a private mental hospital. It is a community health center for the treatment of both major and minor psychiatric illnesses. Health agencies join in providing a wide range of services. Once again Butler points the way to the future, as it leads this time to the integration of treatment resources. Others will follow the trend.

Before presenting some of the aspects of an action program for mental health, I shall repeat a few of the principles upon which treatment programs for the psychoses in hospitals are based. This approach is relevant for major mental illness is the source of public concern.

Principles

The early intensive treatment of acute mental illness results in a higher proportion of patients released from the hospital and a shorter period of hospitalization.[1] In this view small crises are the center of attention instead of large ones that rupture family relationships and extrude the offending member from the home. When treatment is undertaken early, often a few days in the hospital eases the strain upon the family, permits the patient figuratively to pull himself together and once again to face the stresses in life. Recent studies have shown that when patient and family are treated simultaneously, the rate of successful outcome was increased from approximately 60 per cent to 80 per cent.[2] When the family attitudes are not modified, chances of successful adjustment are reduced. Distressing symptoms of mental illness can be relieved promptly when there is early application of individual or group psychotherapy, chemotherapy, or electric shock therapy in appropriate cases.

Chronically ill mental patients can be motivated toward a more active social role. For many, illness represents a withdrawal. Hospitalization, in itself, has in the past extended illness. It has fostered isolation and regression. Patients living in a deprived setting where there was little interaction with others, little stimulation to participate in activities, and little motivation to change did not recover. Many became worse.

With intensive effort, many patients who previously were considered hopeless can now be rehabilitated. Prolonged intensive effort extended over two or three years, however, often is required to overcome handicapping chronic illness. The reestablishment of self-confidence and self-esteem may be aided through the formation of strong relationships with some member of the staff or with a volunteer.

A patient who had been ill for some twenty-seven years in the hospital showed gradual improvement when he found a member of the staff who took a personal interest in his progress and who helped him find a job. His relationships with others at the hospital improved. He secured a position in a bakery in South Boston. Gradually his skills improved. He could not face the anxiety of leaving the hospital and the isolation of living alone in a boardinghouse. For two years he worked in the bakery in town and returned to the hospital every night. Here he felt secure and enjoyed friends. The expressed interest and the comfort of trusted persons with whom he could talk gave him confidence at work. On the night plan, this man was able to make the transition to living alone. For a time he still returned to the hospital to visit his friends. He came to my office to tell me of his success and

continued on next page

*Delivered at Ray Hall, Butler Health Center, Providence, Rhode Island, on April 27, 1961.

to show me his new suit. It was the first suit of clothes that he had been able to buy from his own earnings for twenty-seven years.

Respect for patients is another principle that has been neglected in the regimentation of the overcrowded, understaffed, large public mental hospital. The number of patients willing to come to the hospital voluntarily is steadily increasing. The attitude toward patients is gradually changing. There is greater awareness of the dignity of the individual. Patients are given a greater share in their own management. Self-esteem and self-confidence are regained more easily in a supportive setting that avoids making the patient dependent.

Participation in planning activities helps patients to regain respect and dignity. So does pay for work when employed. At a certain stage in the patient's development, when he has performed well in hospital industry, it is helpful if he can receive a cash incentive. Learning to handle money, learning to be responsible for one's self and learning to spend what one has earned to fill one's own needs is part of rehabilitation training.

We have been successful, as have the Veterans Administration, in placing a number of patients, who have been ill for many years but who have performed well, in the Patient-Employee Program. Here they work at the standard expected of an employee. Patients on the program live in employee dormitories, pay for their room and board, and are held accountable for their actions. Over 60 per cent of those placed in the Patient-Employee Program have been able to rehabilitate themselves and to hold a job.[3] Pay for patients who work in the hospital, as a step in rehabilitation, is a widespread practice in Holland and in England. The expectation that the patient on the open ward will manage his freedom, attend meals, bathe, report for treatment and work is met in most instances. The replacement of external controls on behavior with inner controls is an experience in re-education not an incident achieved by turning a key in a lock.

The need for continuing therapy during convalescence and release from the hospital has made it necessary to integrate the efforts of many agencies to provide services to those who need them. The family physician, social agencies, welfare services, and the visiting nurse association, have a part to play in support of the released mental patients.

Employers are usually intellectually willing to consider hiring a former mental patient. When an ex-patient admits to a mental illness he may be rejected. The excuse may be given that it raises the workmen's compensation rates to take the risk. When patients are prepared for employment through graduated work experiences and have demonstrated their capacity to adjust to others and to conceal their handicap, in most instances the patient is ready for work and can find his own job.

Program

During the past 30 years, community services to psychiatric patients have shown a steady growth in the United States. The growth has paralleled the number of specialists in psychiatry that have moved into private practice in the community. With more psychiatrists available, more general hospitals are willing to accept mental illnesses for therapy as they have consultants on their staff.

With more psychiatric clinics, there have been more resources for the early treatment of acute mental illnesses. The results of early treatment have been sufficiently successful to induce others to come for help earlier than before. The willingness to seek help has increased admissions to psychiatric agencies and hospitals.

In 1958, the total number of patients admitted to general hospitals for psychiatric illness, for the first time exceeded the admissions to state and federal mental hospitals. 257,300 psychiatric patients were admitted to general hospitals.[4] About one half of all general hospitals surveyed had a full-time psychiatrist. One third of the general hospitals had psychiatric out-patient departments; one-fourth admitted mental patients into the hospital. However, only 13 per cent of general hospitals stated they admitted all types of mental illness. Most preferred to accept only neuroses, mild depressions, or psychosomatic disorders.

Physicians in private practice, psychiatric clinics, and general hospitals tend to treat minor mental illnesses. The core problem is the major psychoses. Until very recently, only the mental hospital would accept psychotic patients for therapy. The major unfinished business in psychiatry is major mental illness.[5] Any action program to be effective must offer better ways to treat psychoses. There are some treatment plans that are worthy of replication in the United States.

In Holland, after World War II, there was a marked shortage of mental hospital beds. Amsterdam, a city of a million people, had room only for 1,000 admissions with pressure for many more. In order to control available beds, and to use limited resources wisely, a pre-hospital control service was established. Amsterdam was divided into five areas, each with two physicians and four nurses. It was soon found that pre-hospital service could prevent the admission of many patients who otherwise entered the hospital for screening, evaluation, and short-term therapy. This could be provided without a hospital admission in over half of the cases. The Dutch also found that if they followed patients who were released from the hospital into the community, support would often forestall a readmission and be successful in supporting the patient under transi-

tory stress while continuing at work or in the home. The continuity of information obtained in handling patients, both before and after hospitalization, was invaluable in decision making during a crisis.

Currently, ten physicians and 20 nurses are able to keep some 6,000 patients in control. There are no more than 1,000 admissions from Amsterdam, a city of a million persons. The Boston State Hospital, alone, being one of many hospitals serving the residents of Boston, has 2,200 admissions per year. The Massachusetts Mental Health Center admits another 900 persons. Boston has 800,000 people, fewer inhabitants than Amsterdam. This gives some idea of the value of the Amsterdam Health Service in reducing admission pressure in a large city. Its lessons can be applied in the United States.

Similar findings developed in Nottingham, England, where the Mapperly Hospital with the local health officer, pooled medical and social work staff. Home visits to patients were made. The pre- and post-hospital services were directed to those who couldn't come to the hospital or to the clinic, or who wouldn't come. The success of home visiting and early treatment has been remarkable.

Another exciting community mental health service is known as the Worthing Experiment,[6] Graylingwell Hospital, located in Chichester, England was 22 miles distant from Worthing, a city of 160,000 people. In a mental health center, housed in a large old mansion, that offered multiple services of a home visiting service, an out-patient clinic and a day hospital, more than 1,100 admissions were handled in a year by a very small staff. What was more remarkable, about 67 per cent of the admissions that previously would have gone to the Graylingwell Hospital were successfully treated in Worthing on an out-patient basis without the necessity for in-patient care.

The three experiments described deserve testing in the United States. In this country psychiatric clinics have been utilizing long-term intensive psychotherapy nearly exclusively as a treatment modality. Only a few patients can be handled as a consequence. The cost of treatment is high. The European plan employs a relatively limited number of visits and short-term supportive psychotherapy. The cost per case is relatively low. Large numbers of persons with major illness have been successfully treated by a small staff. Research in the comparative efficacy of the two approaches is long overdue.

One is heartened by the fact that since 1952 there has been a 350 per cent increase in expenditures for community psychiatric services in the United States. This augurs well for the continued development of treatment facilities in the community.

Action Program of the Joint Commission on Mental Illness and Health

In 1955 Senator Hill and Representative Fogarty of Rhode Island pressed in Congress for the passage of the Mental Health Study Act. This federal grant, made to the National Institute of Mental Health, financed the survey made by the Joint Commission on Mental Illness and Health. For the past six years it has made an extensive nation-wide study of the problem of mental illness. An action program has been suggested that will, for the first time, make possible a comprehensive attack on the total problem of psychiatric illness.

It would be impossible in this review to give more than the barest outline of one or two recommendations made by the Joint Commission. Every citizen should read the volume titled, ACTION FOR MENTAL HEALTH, published by Basic Books in March of 1961. This useful volume lays the background, in readable prose, for understanding the problem of mental illness, discusses the reasons for the lag in care, and suggests specific actions that can be taken to catch up.

The final report of the Commission is the culmination of the long study by task forces that have published six independent reports of their findings. Three more reports are in press. In discussing the shortage in professional manpower, the gloomy prediction is made that the situation will worsen, not improve in the decade ahead. The shortage of psychiatrists and mental health workers is related to the deficit in professional manpower for teachers, physicians, and scientists alike. There is little likelihood that any ameliorative change will occur to relieve the shortage; for the high school and the college graduates are the manpower pool from which all of these groups draw.

The long-range plan suggested seeks to salvage potential brain power that is lost between high school and college. It is amazing that of 2,000 of the brightest high school graduates, two thirds do not graduate from college. Only one third of the bright high school students go on to finish college. A change in social attitude toward education and financial assistance for those who can't pay high tuition charges will require a national effort. The national program undertaken must seek to interest American youth in the professional and, in particular, careers in mental health.

The Joint Commission report reviews the lag that has occurred in the study of human behavior, and finds that it is not realistic to launch any crash program in research. The approaches to research are essentially long range. Needed is a balanced portfolio of basic and applied research. The Commission recommends that a larger proportion of funds be invested in basic research and that long-

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term research be encouraged. At the same time there must be some support for risk ventures in persons and in ideas. The Commission urges also expansion of career support in research and of program research as against project research.

The Commission makes extensive recommendations for patient care that can only briefly be touched upon here. Because of the great shortage in professional workers, nonmedical mental health workers with training should be permitted to do short-term psychotherapy under the auspices of recognized mental health agencies. Secondary prevention, with early detection of mental illness, calls for attention to the counselors of troubled people. Persons with psychological orientation, with access to psychiatric consultation, can carry more of the load, particularly of the less serious disorders.

It is also recommended that emergency care programs be extended and that the first call on professional manpower be given to those with major mental illness. As I have stated earlier, every citizen is urged to read the action report.

Recommendations

Lastly I should like to suggest some ways in which citizens can assume a larger role in the development of the mental health program in the community:[1]

1. Recognize the need for change in the treatment program for the mentally ill. The community process of discussion of problems creates the climate in which progress toward program development for the care of the mentally ill may occur.

2. Develop understanding by the public of the principles upon which psychiatric treatment programs are based, learn the reasons new facilities and new programs are required, and what they may be expected to accomplish.

3. Press for financial support of mental hospital treatment programs, particularly the public state hospitals. Recently, Doctor Harry C. Solomon made some interesting comparisons to illustrate the basis for the plight of the public mental hospital. For example, in the Boston State Hospital 115 years ago, a day of patient care cost $1.00. The cost at the Massachusetts General Hospital at that same time was double that in the state hospital, $2.00 per day. In 1961 the cost of the day of care for a patient at the Boston State Hospital had increased to $5.00, while the cost at the Massachusetts General Hospital exceeded $32.00. The proportionate difference between the cost in the two institutions reveals the reasons for the shortage of staff and the inadequate resources present in the public state hospitals a century later. Budgets for state mental hospitals must double in the next five years and treble in ten.[5]

4. Increase community tolerance for minor deviance. Open doors and increased privileges permit patients to explore streets adjacent to the hospital. The hospital's sincerity and trust is tested when the patient goes home without authority. Neighbors may complain and threaten action to prevent "dangerous characters from running loose." A group of petitioners in the neighborhood around our hospital recently brought their legislator to the superintendent's office to protest the patients' freedom to wander in the community. They felt that it was dangerous for the patients to be on the streets without supervision. They were amazed when their attention was called to their lack of concern for their own children whom they permitted to play on the grounds of the Boston State Hospital without any fear for their safety. The difference seemed to be that the patients were on the inside of the fence, but so were their children.

As the doors of our mental hospitals open more widely, patients will leave the grounds before the hospital is ready to approve their release. Although most will be greatly helped toward self-management, some will abuse the privilege and cause the community annoyance and some may even cause them harm. Patients are people and they act like people. Not all people behave the way we think they should. Statistics assure us, though, that most patients won't get into as much trouble, at least not in criminal behavior, as normal people will.

5. Develop the willingness in employers to hire former mental patients. Grob recently interviewed 200 employers in an important study of attitudes toward former mental patients.[7] About half the employers were much concerned about violence or destruction and the effects of pressure and speed upon one who had been mentally ill. Only 13 per cent of the employers knowingly hired a former mental patient during the three-year study period. As a consequence, expatients learned not to disclose their history of illness. When patients did so, most were successful in securing jobs. Positive attitudes toward mental illness help the patient's acceptance on the basis of his productivity and on his capacity to get along on the job without causing disruption.

6. Increase local participation in the treatment program for the mentally ill. Community psychiatric facilities need support and extension. Aftercare services are needed for the returned patient and so are new treatment programs for the mentally ill such as day hospitals, social centers, halfway houses and rehabilitation activities.

These are but a few of the trends now established that foretell an exciting future in improved care and treatment of psychiatric illness.

References

[1]Barton, W. E.: Care and Treatment of the Hospitalized Mentally Ill. Ment. Hyg. 44:281, 1960

[2]Barton, W. E.; St. John, W. T.: Family Care and Outpatient Psychiatry. Am. J. Psychiat. 117:644, 1961

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CRANIAL BONE CHANGES IN CONGENITAL HEART DISEASE

Report of an Adult Case*

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SINCE COOLEY[1] described the bone changes characteristic of the disease which now bears his name, there have been a number of reports in the literature of other disease entities capable of producing the "Cranium en Brosse" picture. In 1958 Ascenzi and Marinozzi[2] first reported two pediatric cases of congenital heart disease with similar bone findings proven at autopsy.

This report concerns a case in an adult and a review of the available world literature.

Case Report

Admission Number 568679. A thirty-two-year-old white male truck driver was admitted for the fourth time to the Rhode Island Hospital on November 27, 1956 for venesection. He had been followed at the Cardiac Clinic since 1936, with the diagnosis of congenital heart disease, and he had been cyanotic since birth. This was thought to be a tetralogy of Fallot. Blood values determined one month prior to admission showed a hematocrit of 92 per cent and a hemoglobin of 22.2 grams per cent. Two of his past admissions were due to gingival hemorrhage following tooth extractions. He had been admitted in 1945 with the tentative diagnosis of subacute bacterial endocarditis, although all blood cultures proved to be sterile.

He had had scarlet fever in childhood. He was restricted from athletic activities but claimed to have been able to keep up with his contemporaries. There was a history of early squatting. For the past several years, he had worked as a full-time truck driver, having no significant complaints. Patient stated that he was able to climb two or three flights of stairs without marked dyspnea. However, dyspnea was mentioned frequently in the clinic record. System review was essentially negative. Patient denied chest pain, orthopnea, edema, palpitation, paroxysmal nocturnal dyspnea, and intermittent claudication. His weight was stable at 115 lbs. Family history was noncontributory. On physical examination the temperature was 98.2, pulse rate 68 per minute, respiration rate 20 per minute, and the blood pressure 140/110 mm. Hg. He was a well-developed, thin white male, deeply cyanotic, lying quietly in bed in no apparent distress. He was alert and co-operative. The skin showed a dusky cyanosis but no petechiae or ecchymoses were noted. The head showed a groove-like midline depression. Fundoscopic examination revealed engorgement of the retinal veins. Heart rate was normal but interrupted by frequent premature beats. The apex beat was visible and palpable in the fifth intercostal space at the anterior axillary line, 12 centimeters from the mid-sternal line. A systolic thrill was palpable over the pulmonic area and the left sternal border. A grade IV harsh systolic murmur was noted over the entire precordium and was loudest over the pulmonic area and left sternal border with radiation to the axilla and neck. A diastolic murmur was not heard. The second pulmonic sound was equal in intensity to the second aortic sound. The lungs were clear to percussion and auscultation. There were no palpable abdominal masses. Marked clubbing of fingers and toes was present. Laboratory data obtained from November 1956 to February 1958 are shown in Tables I and II.

In addition spinal fluid examination performed on two occasions showed normal pressures, chemistries, and cytological picture. The urine had a specific gravity of 1.006 and showed a 4 plus proteinuria. The sediment was unremarkable. Urine and blood cultures were sterile. A twelve lead electrocardiogram (Fig. 1) showed a regular sinus rhythm interrupted by frequent ventricular extrasystoles. The QRS complexes indicated marked right ventricular hypertrophy and strain, particularly in the precordial leads.

A chest film showed a cardiac configuration typical of tetralogy of Fallot. The unusual and interesting roentgenological findings were those of the skull and femurs. Skull films (Figs. 2 and 3) showed a rather marked thickening of the vault,

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BLOOD CHEMISTRY	11/27/56	11/30	12/1	12/3	12/4	12/6	12/8	12/12	12/14	2/58
FBS	62 mg.%									114
BUN	33 mg.%	80		12						67
Creatinine	3.4 mg.%									4.1
Protein	5.0GM. %							4.6		
Albumin	2.3 GM.%							2.8		
Sodium		147 meq./L.	148	145						146
Potassium		5.7 meq./L.	5.0	4.0						4.5
Chloride		116 meq./L.	117	105						106
CO_2 CP		16 meq./L.	15	16		20				13
Total Bilirubin						0.50mg%			0.42	
Direct Bilirubin						0.17mg%			0.12	
Alk.phos.							10.6KAunits			16.5
Calcium							5.2 meq/L			4.4
Phosphorus							2.7 mg.%			6.3
Cholesterol							86 mg.%			
Chol.Esters							27 mg.%			
PBI							2.4 mcg.%			
Blood Ph					7.22					

TABLE I.

HEMATOLOGY	11/27/56	11/28	11/29	11/30	12/4	12/6	12/10	12/11	12/17	2/58
Hemoglobin	27 Gms.			26.2	21.4	18.1		19	17.7	21.3
Hematocrit	85%	81%		77%	62.5%	56%		59	54.5	69%
WBC	4,450		6,650					12,350	12,000	11,800
Differential	P-60L-36M-4		P-86L-7M-6E-1					P-79L-15M-4E-2	P-86L-12M-2	P-88-6-9-M-1-E-2
PTA	30%						26%	32%	64%	
Bleeding time		½min.				½min.				
Clotting time		11min.				21min.				
Retic.Count			3.3%						4.0%	
Platelets						122,000				
Fibrinogen						0.2Gm%	0.2Gm%			
Sed. Rate								1csr 12		

ON 12/14----- *1. Red blood cell fragility - hemolysis begins at 0.52% NaCl and is completed at 0.32% NaCl.
2. Clot retraction - complete in 24 hours.
3. Prothrombin consumption - slightly below normal.

12/16----- *1. Hemoglobin electrophoretic pattern - normal.

TABLE II.

particularly involving the parietal bones and that portion of the frontal bone adjacent to the coronal sutures. The diploic layer in these regions showed considerable proliferation at the expense of the outer table which was markedly thinned out and in some places almost indistinguishable. On the AP films the thickening had produced a symmetrical, parietal bulging with a resultant sagittal groove. There was also increased porosity giving the cranial vault a somewhat spongy appearance, and there were perpendicular striations visible in both parietal regions which appeared as multiple, small, hair-like spicules standing on end.

Both femurs (Fig. 4) were demineralized with irregular coarsening of the trabecular pattern. The medullary cavities were widened and there was diffuse thinning of the cortex. In addition, scattered ill-defined areas of rarefaction in the medullary canals were noted. The day following admission, a phlebotomy of 500 cc. was performed. Approximately two hours after this was completed, the patient became comatose. On the second day definite signs of left facial and right hemiparesis appeared. He was comatose for three days, but on the fourth day, he awakened and responded to external stimuli. Some motor power returned to the right arm and leg for the first time on the sixth day. Ten days later, he seemed fully recovered except for a slight residual motor weakness on the right. However, at the same time, patient developed acute urinary retention and severe subcutaneous bleeding in a girdle-like distribution about the hips and legs which persisted for several days and gradually faded. This was associated with severe intermittent diffuse abdominal pain. The combination of phlebotomy and subcutaneous bleeding reduced the hematocrit to a range of 55-60 per cent with a hemoglobin of 17-18 gms. In spite of the patient's very stormy hospital course, he seemed to recover quite well over a period of time with only a slight generalized weakness and no residuals of his cerebral vascular accident. The patient was discharged on the twenty-eighth hospital day.

On his first visit to our Cardiac Clinic, he complained of shortness of breath and mild angina on exertion, and on subsequent follow-up, the patient became increasingly dyspneic and developed angina-like pain. His course in spite of digitalization was progressively downhill. He refused hospitalization and further studies, such as cardiac catheterization, in order to evaluate possible surgical correction. In February of 1958 he again entered the hospital with

evidence of a new cerebral vascular accident and was found to be in azotemia. He appeared at first to rally but then showed further evidence of renal failure and progressive cerebral damage and died on his eighth hospital day. No autopsy was obtained.

Discussion

The case presented has been sufficiently investigated to exclude the most common causes of hyperplastic cranial changes. Certainly the absence of anemia, the normal hemoglobin electrophoretic pattern and the lack of increased resistance in red cell fragility exclude Cooley's anemia as the underlying cause. Similarly, other hemolytic diseases were eliminated.

The literature contains a number of articles on disease entities producing hyperostotic lesions of the skull. These can be divided in two broad categories, depending on whether or not they are associated with an anemic or polycythemic state (Table III). By far, the most common cause of cranial changes is thalassemia major.[3,4,5] Since Cooley's original description was published in 1925, numerous reports have appeared in the literature. Subsequently, sickle-cell anemia[3,5,6] and spherocytosis[3,5,7] infrequently were shown to produce similar changes. J. Caffey reports[3] that Cooley's anemia frequently involves the frontal bone, whereas sickle-cell anemia and spherocytosis more often involve the parietal bones. Chronic malaria is cited as a rare cause.[2] Iron deficiency anemia was included for the first time by Eng[8] in 1958 with a single case report in a twelve-year-old Indonesian girl. Eight similar pediatric cases were subsequently added in 1960.[9,10]

Cranial changes in association with polycythemia vera have been reported only by Dykstra and Halbertsma.[11] This was a child first seen at the age of

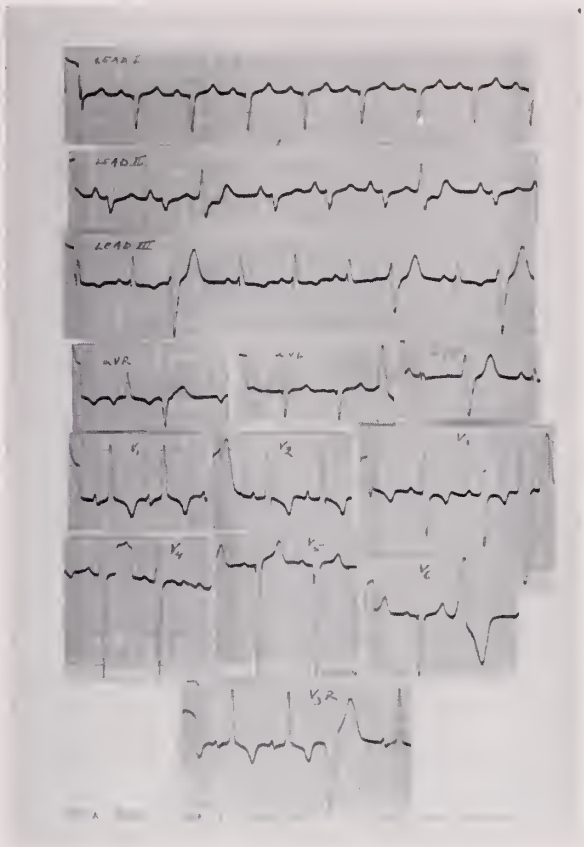
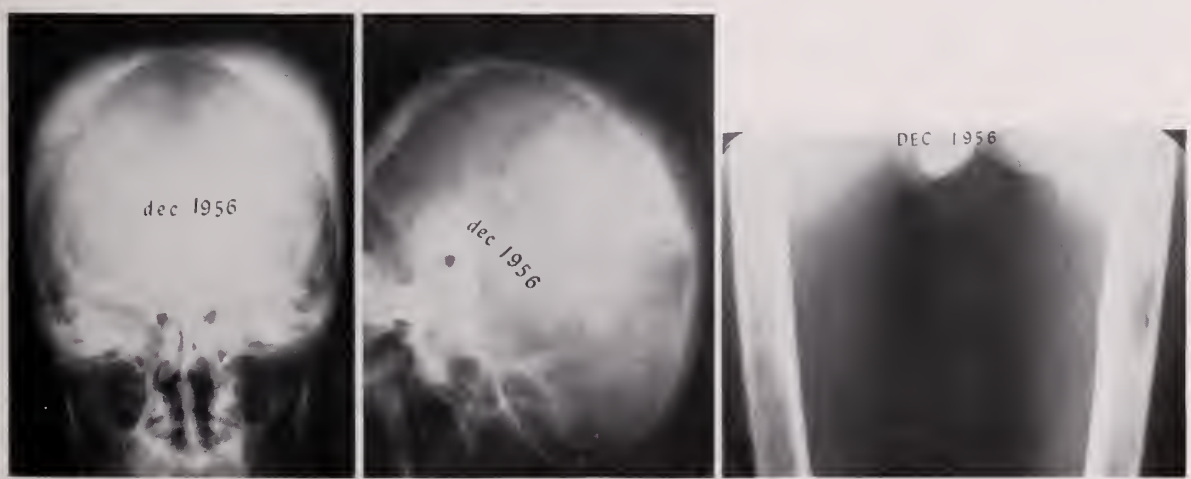


FIGURE 1

six and followed until death at the age of twelve. At age six, X-rays of the skull were normal. At postmortem examination six years later the typical cranial findings were found. It should be emphasized that polycythemia vera in childhood is extremely rare. On the other hand, bone changes have not been described in a large series of cases of polycythemia vera in adults.[12]

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FIGURES 2, 3 and 4

TABLE III

Disease Entities Causing "Cranium en Grosse"

Disease State	Frequency	Reference
I. In Association with Anemia		
Cooley's Anemia	Common	1, 3, 4, 5, 14
Sickle-cell Anemia	Infrequent	3, 5, 6
Spherocytosis	Rare	3, 5, 7
Malaria	?	2
Iron Deficiency Anemia	Nine cases	8, 9, 10
II. In Association with Polycythemia		
Polycythemia vera Childhood only	One case	11
Polycythemia secondary to Congenital Heart Disease —		
Children	Twelve cases	2, 13
Adults	One case	Authors'

Among the secondary polycythemias, only those due to congenital heart disease have been so far incriminated. An extensive review of the literature revealed only two cases, both reported by Ascenzi and Marinozzi in 1958.[2] Antemortem laboratory data were incomplete but postmortem studies tended to rule out other causes. Later the same year, in a general review article on radiologic skull changes in systemic disease, ten cases were cited.[13] However, no detailed report is given except that these hyperostotic cranial lesions were noted in children with cyanotic congenital heart disease.

It is fairly obvious that the common denominator of all these disease entities that produce the "cranium en brosse" picture is bone marrow hyperplasia. Cooley et al., in 1927[1] offered the explanation that these changes were the result of the reaction of the marrow to prolonged overstimulation beginning before the cortex is too firm to permit the overgrowth of marrow. They explain the striations and trabeculations as indicating replacement of exhausted marrow by new bone. These explanations are still valid. Abnormal endocrine factors and vitamin deficiencies have been implicated[14] but not proven.

The severity of the bone changes is apparently related to the severity, intensity, and duration of the hematological disorder. However, the fact that it is rarely found in cyanotic congenital heart disease introduces an unknown factor or factors which yet have to be determined. Bone marrow hyperplasia and whatever other unknown factors exist must occur in childhood, in order for the skeletal changes to take place. This also explains the absence of similar cranial changes in secondary polycythemias developing late in life.

SUMMARY

An adult patient with hyperostotic cranial changes and tetralogy of Fallot is presented. The literature concerning this abnormality has been reviewed. Attention is called to the fact that while "cranium en brosse" is not infrequently noted among certain anemias its association with polycythemia secondary to congenital heart disease is uncommon. Twelve previous cases in children have been reported or cited. No previous report of this lesion in the adult has been found.

References

[1]Cooley, T. B.; Witwer, E. R., and Lee, P.: Anemia in Children with Splenomegaly and Peculiar Changes in the Bones. Amer. J. Dis. Child. 34:347-363, 1927

[2]Ascenzi, A., and Marinozzi, V.: Sur le "Crane En Brosse". Au Cours des Polyglobulies Secondaires a L'Hypoxemie Chronique. Acta Haematologica 19:253-262, 1958

[3]Caffey, J.: The Skeletal Changes in the Chronic Hemolytic Anemias. Amer. J. Roentgenology 37:293-323, 1937

[4]Caffey, J.: Cooley's Erythroblastic Anemia — Some Skeletal Findings in Adolescents and Young Adults. Amer. J. Roentgenology 65:547-560, 1951

[5]Caffey, J., Pediatric X-ray Diagnosis, 2nd Edition, 1950 Revision. Year Book Publishers, Inc. 762-773 (Long Bones); 62-68 (Skull)

[6]Macht, S. H., and Roman, P. W.: The Radiologic Changes in Sickle-Cell Anemia. Radiology 51:697-707, 1948

[7]Snelling, C. E., and Brown, A.: A Case of Hemolytic Jaundice with Bone Changes. J. Pediat. 8:330,337, 1936

[8]Eng, L. L.: Chronic Iron Deficiency Anemia with Bone Changes Resembling Cooley's Anemia. Acta Haematologica 19:263-268, 1958

[9]Britton, H. A., Canby, J. P., and Kohler, C. M.: Iron Deficiency Anemia Producing Evidence of Marrow Hyperplasia in the Calvarium. J. Pediat. 25 (4):621-628, 1960

[10]Shahidi, N. T., and Diamond, L. K.: Skull Changes in Infants with Chronic Iron-Deficiency Anemia. New Eng. J. Med. 262:137-139, 1960

[11]Dykstra, O. H., and Halbertsma, T. (Haarlem, Netherlands): Polycythemia Vera in Childhood — Report of a Case with Changes in the Skull. Amer. J. Dis. Child. 60:907-916, 1940

[12]Hodgson, J. R.; Good, C. A., and Hall, B. E.: The Roentgenographic Aspects of Polycythemia Vera. Proc. of Staff Meetings of Mayo Clinic 21:152-157, 1946

[13]McAfee, J. G.: The Roentgen Signs of Systemic Disease in the Skull. Amer. J. M. Sc. 236:648, 1958

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THE MEDICAL WITNESS

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IT IS GENERALLY AGREED among doctors that the amount of instruction received in medical school in medicolegal medicine is altogether too scanty. Because of the lack of adequate instruction in this phase of medicine, the average physician dislikes appearing in court as a medical witness during his early years of practice. The nature of my practice is such that during the past several years I have had to appear in court as a medical witness on numerous occasions, with the result that I have been afforded frequent opportunities to improve my knowledge regarding this phase of medicine. The purpose of this paper is to share with my fellow practitioners some of the basic lessons that I have learned from actual experience as a witness, with the hope that it will be of help to the physician making infrequent court appearances.

First, it would be best to state emphatically that the physician who does not wish to appear in court as a medical witness should not accept personal injury or compensation cases. When he accepts such cases, he becomes morally obligated to his patient or to the insurance carrier to appear in court if his testimony should be required. By the same token, the attorney requiring the physician's testimony should forewarn the doctor well in advance so as to allow him ample time to rearrange his daily schedule. It is not fair for an attorney to call a physician on the telephone at 1:00 P.M. and expect him to appear in court at 2:00 P.M. of the same day.

Medical Records

One must remember that every personal injury or compensation case is a potential medicolegal case. In view of this, it is of the utmost importance that the physician make detailed notes pertaining to the case. In addition to listing the name, sex, age, and occupation of the patient, notes on a personal injury case should include: 1. a detailed history, 2. physical examination findings, 3. laboratory results, 4. diagnosis, 5. treatment rendered, 6. causal relationship, and 7. prognosis.

It is possible that if an adequate report has been prepared, testimony in court may not be necessary. A clear, complete report may result in the case being settled out of court between the lawyers for the plaintiff and the lawyers for the defendant. Good notes are advisable also because the case may not be heard in court until a few years after the patient was originally seen. In taking a history, the manner in which the accident occurred should be adequately detailed. It is not enough to say that the patient "slipped and fell down the steps." If the steps were defective or there was water on the steps, it is important to state these facts. All subjective symptoms, no matter how trivial, should be listed, in spite of the fact that the examiner may feel that they will not be substantiated objectively. The examination should list all areas of tenderness, discoloration, swelling, limitation of function of the part, or parts involved. A description of the X-ray findings as well as a report covering the results of all diagnostic tests should be included. The diagnosis should include all injuries sustained. It is not enough to list only the major injuries.

All types of treatment should be listed. Any medication, immobilization of parts, operations, as well as physical and mental therapy, should be included.

An opinion should be given as to causal relationship. If it is believed that there is no relationship between the objective findings and the manner in which the patient alleges that he sustained the injuries, the physician should so state in his report. If on the other hand, the examiner concludes that the findings are due to the accident in question, it becomes mandatory for him to make a specific statement to that effect.

A good report should also give a prognosis whenever possible. The purpose of giving a prognosis is to make known to both the plaintiff's attorney and to the defendant the possible or probable future course that the injury may take. This will aid attorneys in handling the case.

Willing or Unwilling Appearance

It must be emphasized that if the physician has treated a personal injury case or has examined the case as an expert, he becomes morally obligated to testify in the case if he is requested to do so. The careful, intelligent lawyer will warn the doctor in

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advance about the probable necessity of his appearance in court in a given case on a given date, so that the physician may make the necessary preparations. It is wise to review one's notes prior to appearance in court, particularly if it has been a long period since the case was treated. It is much better and pleasanter to appear in court voluntarily than under subpoena. If the physician witness goes to court voluntarily, he will find that most attorneys and judges will try to make it as convenient for him as possible. However, if he refuses to appear voluntarily and his testimony is required, he may be subpoenaed and thus required to appear in court at a time which is highly inconvenient. In addition, if he testifies as a result of being subpoenaed, his only remuneration will be the very nominal amount paid him when he is served with a subpoena. On the other hand, if he appears voluntarily he may make a reasonable charge for the time involved. As a subpoenaed witness, the physician becomes a common witness, which means that he testifies only as to what he knows about the case, and is not required to express opinions, unless he chooses to do so voluntarily.

If the physician is subpoenaed without having been given an opportunity to state as to whether or not he would testify voluntarily, and he finds that it is inconvenient for him to appear at the time which the subpoena dictates, he may call the attorney who had the subpoena issued and ask for permission to appear at a more suitable time. If the attorney denies a reasonable request, in extenuating circumstances it may be possible for the doctor to appeal to the judge, explain his plight, and hope that the judge may see fit to ease the doctor's dilemma.

On the Witness Stand

For appearances on the witness stand, I should like to offer the following simple suggestions: 1. The witness's clothing should be neat and conservative. 2. His speech should be clear and loud enough so that it can be easily heard by those in the courtroom. 3. The witness should not be pretentious, pompous or argumentative. 4. He should be courteous at all times. 5. The witness should face the jury when speaking. 6. His answers to the questions asked by the attorney should be as direct as possible. 7. Lengthy medical terms should be avoided. If one must use medical terminology, it is advisable to explain in laymen's language what is meant by the terms used. 8. If the witness does not know the answer to a question, he should not hesitate to say that he does not know. His statement that he does not know the answer to a question will be no reflection on his knowledge or intelligence. 9. If he does not understand the question which is asked, he should so advise the interrogator. 10. All records should be brought to court so that the witness may refresh his memory. However, he must remember that if he uses his notes, the opposing attorney may exercise his right of examining them for the purpose of cross examination. 11. It is advisable that the witness be courteous, not only to the presiding justice, the jury, and to the attorney who requested him to testify, but also to the opposing lawyer. One must remember that the opposing lawyer has nothing against the witness personally. He is merely trying to do his best for his client. 12. Before answering a question, it is wise to hear the entire question and to be sure that the opposing attorney does not raise objections to that question before the answer to the question is started.

Statistics

It is interesting to note that statistically only a very small number of the total number of personal injury cases actually come to trial. I am informed by attorneys who handle a large number of personal injury cases that approximately 82 per cent of all personal injury cases are settled out of court. They further state that of the remaining 18 cases out of a hundred, approximately 13 to 15 cases are settled before they actually reach the trial stage. This then means that approximately only three to five per cent of personal injury cases actually come to trial. It is conceivable that properly prepared, detailed, unbiased medical reports could reduce even further the number of cases which come to trial.

Fees

I have purposely avoided a discussion of the subject of fees for testifying, as I consider this a personal matter. I believe also that the size of the fee should be dependent upon whether or not the witness is an expert in his field, and on the length of time that he has to spend away from his work to appear in court. Unless he considers himself a professional witness, a physician is entitled to feel that he is being paid for the time that he spends away from his regular work rather than for testifying.

SUMMARY

1. Physicians should not accept personal injury cases unless they are prepared to testify in court.

2. Those who accept such cases should keep detailed records, including history, physical findings, treatment, laboratory studies, causal relationship, and prognosis.

3. When the physician appears on the witness stand, he should dress neatly, speak clearly and audibly as he faces the jury, be courteous, and use laymen's language insofar as possible.

4. The witness should never forget that he is testifying under oath.

HYPERURICEMIA IN MYOCARDIAL INFARCTION

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Introduction

DOES ELEVATED BLOOD uric acid as well as elevated blood cholesterol play a role in the pathogenesis of arteriosclerotic heart disease and myocardial infarction? Laboratory studies performed on a group of 50 patients who have been observed as a part of the pilot study on myocardial infarction conducted at the Memorial Hospital show that blood uric acid levels are elevated more frequently than are blood cholesterol levels.

The degenerative effect of uric acid on the vascular wall is well known.[1,2,3,7] Clinical observations on the relationship between hyperuricemia and coronary artery disease date from 1880,[2,3] but reports about elevated blood uric acid levels in myocardial infarction have been infrequent during the ensuing years. During the past five years, however, there have been several reports in the world literature discussing the role of hyperuricemia in myocardial infarction. The purpose of this paper is to report on the incidence of hyperuricemia in 50 cases of acute myocardial infarction which have been under our observation.

Material and Methods

WE HAVE INCLUDED in our study 50 patients with the proved diagnosis of acute myocardial infarction admitted consecutively to the wards and private service of a general hospital. The diagnosis of myocardial infarction was made on the basis of the clinical history, the electrocardiogram, elevation of sedimentation rate, elevated transaminase level, and fever. The electrocardiographic criteria were those established by the World Health Organization in their bulletin No. 168, *Hypertension and Coronary Heart Disease*.[12] Those patients who died within a few hours of hospitalization and upon whom serological examinations were not done were excluded from this study. No patient had a history of diabetes and there was only one with a previous history of clinical gout. There were no known blood dyscrasias. In particular, there was no correlation between either elevated hemoglobin or obesity and hyperuricemia as reported by Lewis and Gardner.[13] All but three patients were on a coumarin type of anticoagulant during their hospital stay.

The blood uric acid determinations were done after the method of W. T. Caraway. The cholesterol was done by the modification of the Sperry-Schoenheimer technique. The blood uric acid and cholesterol were considered to be abnormal only when in excess of 6 mg. and 250 mg. respectively. These tests were done within the first twenty-four hours after admission and on the sixteenth day of hospital stay. The accuracy of the laboratory determinations was assured by the use of unknown controls daily.

Discussion

The age range of the 50 patients under consideration was from 39 to 85; 35 were males and 15 females. Thirty-eight of the patients survived (10 females and 28 males), while twelve died (5 females and 7 males). Both uric acid and cholesterol were found elevated in 13 of the entire group with no predilection for either sex. The incidence of hyperuricemia was higher than that of hypercholesterolemia (29 over 20). Of the 12 patients that died, eight had hyperuricemia and two hypercholesterolemia. In general no effort was made to correct these elevated levels during the hospital stay except that the majority of cases were placed on a low cholesterol diet. Byshydroxycoumarin[8] and biscoumacetate[9] have been reported to have uricosuric properties but in our series there was no evidence of this. No blood dyscrasias were present in the group with elevated uric acid. Chronic renal disease with an elevated blood urea nitrogen (BUN) is sometimes associated with an elevated uric acid; but in our cases there was no relationship. Thus, where the BUN was 14 mg., uric acid was found to be 16 mg. in one instance, while a BUN of 71 was associated with a uric acid of 6.5 in another. Thiazide drugs have been known to precipitate attacks of gout, but were not a factor in any of our cases.

The relationship between hypercholesterolemia and the pathogenesis of arteriosclerotic myocardial infarction is widely accepted today, but the role of uric acid is rarely mentioned. In our group of cases

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hyperuricemia was present with a greater frequency than hypercholesterolemia. Gertler and Associates in 1951[10] stressed the potential importance of this in coronary problems. He reported, in a group of 92 males under the age of 45 who had experienced a myocardial infarction, an incidence of hyperuricemia, of 48 per cent whereas the incidence in a random population study was 3 to 6 per cent. Dreyfus and Czackes[8] have also mentioned the increased incidence of elevated uric acid in recognized coronary artery disease.

What part does uric acid play in the development of vascular lesions? Traut and his Associates[1] in an article concerning the specific vascular changes in gout indicate that "arterial disease is suspected as an inevitable as well as the most serious complication of gout." Others,[3] have written concerning the high incidence of atherosclerosis as a complication of gout. Urate deposits are occasionally found in arteries and in the myocardium[2,14] at postmortem. Perhaps more specific efforts should be made to show urates in the arterial walls of coronary patients. It has been suggested that uric acid is a surface-active agent and may cause subintimal injury and deposition of lipids thus initiating atherosclerosis. Heredity has been implicated in the genesis of atherosclerosis, and both hyperuricemia and hypercholesterolemia are inherited as simple mendelian dominant characteristics.

The association of hyperuricemia and gout with atherosclerosis is not a new concept. In 1880, a famous Italian clinician stated, "I have observed many cases of angina in people with gout, and often very severe forms of it. Because of this, I have the habit when I see angina pectoris in an adult, robust individual without any significant signs of disease of the heart or aorta, always to look for signs of gout, latent or manifest, or even a family history. For to me, this important question must be answered. Is angina pectoris in gouty individuals caused by gout or by changes that gout may produce in the heart and coronary arteries?" Later in his chapter about angina pectoris, we read, "If we take into consideration the few cases where autopsies were performed on people with gout, we must say that significant lesions were found in the aorta, coronary arteries, pericardium, and myocardium itself. From this, we can state that angina pectoris in gouty individuals is a symptom of these lesions and not of gout. We can certainly accept, with limitation, the theory that uric acid when it is increased in the blood may damage any organ, and even without producing demonstrable lesions may cause functional and transient disorders at the beginning." This was written 80 years ago and in the interim very little new has been contributed to our knowledge of this problem.

It seems logical to conclude on the basis of our 50 cases and the reports of others that hyperuricemia and hypercholesterolemia are frequently associated in acute myocardial infarction.

Considerable therapeutic effort is directed at attempts to lower blood cholesterol in the patient with coronary sclerosis. Perhaps an effort should be made at reducing blood uric acid levels when they are found elevated in coronary patients or in asymptomatic individuals with a family history of heart disease. Fortunately, several uricosuric drugs are available, and the controlled use of them in the treatment and prophylaxis of coronary artery disease may be of value.[5]

Summary

Among fifty patients with acute myocardial infarction admitted to a community hospital during a six-month period, hyperuricemia was found more frequently than hypercholesterolemia. Of the 12 patients who did not survive, eight had elevated blood uric acid, while two had elevated blood cholesterol. The possible importance of uric acid in relation to atherosclerosis and certain therapeutic implications of this relationship are suggested.

References

[1]Traut, E.; Szanto, P.; Knight, A.; Passarelli, E.: Specific Vascular Changes in Gout. J.A.M.A. 156:591, 1954
[2]Cardarelli, A.: La malattie nervose e funzionali del cuore. Stabilimento Tipografico F. Giannini, Napoli, Italy, 1880
[3]Natoli, A.: Uric Acid and Coronary Syndromes. Progresso Medico (Italy) 15:706, 1960
[4]Frank, M.; DeVries, A.; Atsmon, A.: Gout Simulating Cardiac Pain. Amer. J. Cardiol. 6:929, 1960
[5]Kohn, P., Prozan, G.: Hyperuricemia, Relationship to Hypercholesterolemia and Acute Myocardial Infarction. J.A.M.A. 170:1909, 1959
[6]Dreyfus, F.: The Role of Hyperuricemia in Coronary Heart Disease. Dis. Chest. 38:332, September, 1960
[7]Dreyfuss, F.: Hyperuricemia and Coronary Artery Disease. Harefuah (Israel) 57:329, 1959
[8]Dreyfuss, F., Czaczkes, J.: Uricosuric Action of Byshydroxyicoumarin, A.M.A. Arch. Int. Med. 102:389, 1958
[9]Mivashan, R., Horwitz, M.: Uricosuric Action of Biscoumacetate, Lancet I: 1191, 1955
[10]Gertler, M.; Garn, S.; Levine, S.: Serum Uric Acid in Relation to Age and Physique in Health and in Coronary Heart Disease. Ann. Int. Med., 34:1421, 1951
[11]Warshaw, L.: Acute Attacks of Gout Precipitated by Chlorothiazide Induced Diuresis. J.A.M.A. 172:802, 1960
[12]World Health Organization Technical Report Series No. 169, 1959
[13]Lewis, J. G., Gardner, J. E.: The Relation of Serum Uric Acid to Hemoglobin Level in Patients with Cardiac and Respiratory Disease. J. Clin. Path. 13:502, 1960
[14]Pund, E. E., Jr.; Hawley, R. L.; McGee, H. J.; Blount, S. G., Jr.: Gouty Heart. New England J. Med. 263:999, 1960

SPORTS INJURY CONFERENCE

MONDAY, SEPTEMBER 11

Progress Notes . . .

THE ANEMIAS

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Diagnosis

HEMOGLOBINOMETRY: In a physician's office the most accurate and convenient method is that of Sahli. This method is capable of an accuracy of plus or minus 0.5 gram of hemoglobin per 100 cc. of blood. In the important range of 10-15 grams of hemoglobin, this represents an error of plus or minus 5 per cent which compares favorably with that obtained by the most refined photoelectric methods. The accuracy of what appear to be more convenient methods, such as the Tallqvist scale, is so low as to be of no value as a screening test for anemia. The need for maintenance and accurate standardization of the more refined photoelectric equipment available for hemoglobinometry makes such instruments unsuitable for office use. Large laboratories, in particular hospital laboratories, on the other hand can afford to spend the time and effort to standardize and maintain these instruments; hence they are suitable for such institutions. One should not, however, expect accuracy greater than plus or minus 7 per cent for data obtained with them, the reproducibility being only plus or minus 5 per cent to which must be added the error which occurs in the collecting of the specimen. The micro-hematocrit determination is actually a more suitable method for the screening of patients for anemia since in this method errors in collecting the blood specimen are eliminated. Micro-hematocrit determination would be highly suitable for office use except that the instruments are far more expensive than the simple Sahli apparatus, and the considerable noise produced by the centrifuge makes it unsuitable in most offices. Since most hospitals find it expedient to maintain a photoelectric instrument for hemoglobin determination, it is probably best to use both hemoglobin and micro-hematocrit determination when screening for anemia in a hospitalized patient.

Normal Values: Regardless of which method of hemoglobin determination is chosen, a clear understanding of normal values is obviously essential. Rather than rely on an arbitrary percentage of normal, the physician should keep clearly in mind the lower limits of normal values for males and females. These are 14.0 grams and 12.0 grams of hemoglobin per 100 ml. of blood respectively, and volume of packed cells (micro-hematocrit) of 40 per cent and 37 per cent respectively. Unless it is known that a particular individual normally runs hemoglobin or hematocrit values higher than these limits of normal, a diagnosis of anemia should not be made unless values less than these are obtained. Conversely, a diagnosis of polycythemia should not be made unless hemoglobin values above 16.0 grams for women or 18.0 grams for men are found and the hematocrit is above 47 per cent or 54 per cent respectively. As the range of normal is considerable, an accurate determination of the hemoglobin or micro-hematocrit should be an essential part of a routine physical examination since, by having data available for comparison, minor degrees of anemia may be detected at a later time. Because of the standard error which obtains in hemoglobinometry, a change of less than 10 per cent should not be considered significant either in hemoglobin or micro-hematocrit.

Classification

The cause of anemia often becomes apparent in the course of history taking and physical examination. In many such instances the cause of the anemia is clearly secondary to some other disease, and the classification of the anemia is then no diagnostic problem. If the anemia, however, is the only clearly recognizable major abnormality after an exhaustive history and physical examination have been done, then an attempt to classify the anemia into broad categories becomes desirable. It is becoming more and more apparent that primary reliance on the so-called red cell indices is fraught with pitfalls, not only because the laboratory determinations from which the indices are calculated are subject to errors, but also because the resulting artificial categories are usually of little help in arriving at a diagnosis and even less help in the management of a problem case. Thus, macrocytic indices are by no means synonymous with pernicious anemia, or even vitamin deficiency states, because in fact macrocytosis is seen in hemolytic anemia and a variety of

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nonrelated anemias. Also, the vast majority of problem anemias are normochromic and normocytic, and represent a great variety of disease processes. On the other hand, the recognition of hypochromia is very useful because it focuses attention on two categories of anemias, namely iron deficiency, and hemoglobin disorders such as Mediterranean anemia. While there is no denying that the blood indices are fairly accurate in recognizing hypochromia, the inspection of a blood smear allows the same conclusion to be drawn not only more quickly, readily, and cheaply, but more reliably. Inspection of the blood smear also allows for recognition of the typical oval macrocytes of pernicious anemia and related states. Through inspection of the blood smear one may recognize the double population of round macrocytes and microcytes of hemolytic anemia and the variation in size and shape of other characteristic anemias, none of which is detected by the indices which represent only an average of all cells.

Rather then rely on indices, it is much more useful to classify anemias as being due to (1) blood loss, (2) excessive blood destruction, or (3) bone marrow failure. Blood loss is often apparent from the history, but at times repeated stool examinations for occult blood are necessary. Excessive blood destruction, i.e. hemolysis, can be ruled out if the reticulocyte count is below 7 per cent. The broad categories of bone marrow failure may be divided into four subcategories. These are: 1. the deficiency states (iron deficiency, pernicious anemia, anemia of myxedema); 2. the congenital hemoglobinopathies (Mediterranean anemia and sickle-cell anemia); 3. bone marrow invasion (lymphomas, leukemias, and other malignancies); and 4. chronic infections and other chronic debilitating diseases such as uremia, liver failure, and the connective tissue disturbances. Only a careful weighing of all the available evidence including platelet counts, reticulocyte counts, blood chemistries, and bone marrow aspiration allows for a definite identification of an anemia suspected to be due to bone marrow failure.

Specific Illnesses

Iron deficiency and hemoglobinopathies: In this area, nutritional iron deficiency is probably the most common anemia in children and usually poses no diagnostic or therapeutic problem. In adults, iron deficiency anemia must always be thought to be due to abnormal blood loss since nutritional iron deficiency as the sole cause of anemia in adults is practically non-existent. Since both iron deficiency and Mediterranean anemia are hypochromic, confusion between the two entities is common. Table I lists the points helpful in the differential diagnosis.

TABLE I

	Iron Deficiency Anemia	*Mediterranean Anemia*
Hypochromic	Slightly	Markedly
Poikilocytosis	None	Moderate
Variability	Variable	Constant
Family Incidence	None	Familial
Serum bilirubin	Low	Normal to elevated

Of the differences pointed out in the table, the constancy of the anemia in Mediterranean anemia is probably the most helpful diagnostic feature. In Mediterranean anemia the level of the hemoglobin is always the same. In iron deficiency, because of the variability of blood loss and iron intake, the level of the hemoglobin is apt to vary over a period of time.

The management of these illnesses is, of course, entirely different. Mild Mediterranean anemia with hemoglobin values as low as 10.0 grams is compatible with normal life and normal activity, and should not be considered the cause of symptoms. There is no treatment for this condition except transfusions, which should be reserved for the more severe cases. In iron deficiency anemia, on the other hand, the main problem is the determination of the cause of blood loss and its treatment. In the more severe cases of Mediterranean anemia, in which splenomegaly and jaundice are frequently noted, a hemolytic component is often present. This can be confirmed by means of radiochrome labeled red cell survival. If significant blood destruction is found, splenectomy has often been beneficial in reducing the transfusion requirement.

Mediterranean anemia is actually only one of many congenital hemoglobin abnormalities. These types of hemoglobins have been named hemoglobin A, C, D, E, F, G, H, I, J, K, and S. Hemoglobin A is that found in the normal adult. Hemoglobin F is the hemoglobin formed by the human fetus, and is also found in variable amounts in adults afflicted with some of the other hemoglobinopathies. Hemoglobin S is perhaps best known since it is the hemoglobin of sickle-cell disease. In their mild forms all the hemoglobinopathies are similar to the mild form of Mediterranean anemia; the anemia is mild and of constant severity, and there is hypochromia, target cell formation, and moderate poikolocytosis. The severe forms are found whenever hemoglobin S, the sickling hemoglobin, is present either in the homozygous form, or combined with one of the other (hemolytic crises). Thus, the patient who has inherited the sickle-cell trait from both parents and the patient who has inherited sickle-cell trait from one parent and another hemoglobinopathy from another parent are both subject to severe hemolytic crises. The various hemoglobins can be identified by means of paper electrophoresis

which is now a widely used laboratory procedure. The test basically consists of placing a drop of hemoglobin solution at one end of a wet paper strip. A constant electric current is then applied to the paper and the various hemoglobin components then travel along the paper at varying rates. It is this varying rate of migration which allows for the identification of the various hemoglobins. Hemoglobin A, C, D, E, F, and S migrate at different speeds and are readily identified. The hemoglobin of Mediterranean anemia, however, travels at the same speed as hemoglobin A, the normal adult hemoglobin. Mediterranean anemia, thus, cannot be diagnosed by electrophoresis. Hemoglobin F is not a *cause* of human anemia, but rather occurs in hemoglobinopathies as a compensatory mechanism. It has now been established that the various hemoglobinopathies are caused by very slight changes in the composition of the globin portion of the hemoglobin molecule. When these changes alter the electrical charge of the molecule, as occurs in hemoglobin C or D, then alterations in the electrophoretic pattern are produced. On the other hand if, as occurs in Mediterranean anemia, the alterations of the molecules do not produce a change in the electric charge, then the molecule has an electrophoretic pattern identical with that of normal hemoglobins. Mediterranean anemia can thus be defined as an alteration in the hemoglobin molecule which, purely as a matter of coincidence, does not produce a change in the electrophoretic pattern. The other hemoglobinopathies are characterized by a similar type of change in the hemoglobin molecule which, however, results in a change in the electrophoretic pattern.

Pernicious Anemia: The diagnosis of pernicious anemia is usually suspected clinically and is confirmed by the characteristic appearance of the blood smear and bone marrow. Recent studies have shown that the characteristic changes in the blood and bone marrow are obliterated by energetic transfusions and that the bone marrow picture loses its diagnostic features within a few hours after the administration of liver, Vitamin B_{12}, or folic acid. Hence it is essential to avoid transfusions and antipernicious anemia therapy in all cases where pernicious anemia could possibly be suspected until the diagnosis has definitely been established. In spite of the many oral preparations available for the treatment of pernicious anemia, the convenience and 100 per cent effectiveness of 30 micrograms of B_{12} given parenterally once a month make this still the treatment of choice.

Pernicious anemia and pernicious anemia-like diseases are now clearly recognized as due to deficiency of vitamin B_{12} or folic acid. In classical pernicious anemia vitamin B_{12} is not absorbed by the small bowel because of a deficiency of a factor in gastric mucus. This intrinsic factor is needed to enable B_{12} (extrinsic factor) to be absorbed by the small bowel. Nutritional "pernicious anemia" is due to failure of adequate B_{12} intake over a period of many years. In sprue the accompanying "pernicious anemia" is due to failure of intestinal absorption in spite of adequate intrinsic and extrinsic factors. Finally, in pernicious anemia of pregnancy the deficiency apparently is usually one of folic acid intake.

The Schilling test allows differentiation of some of the pernicious anemia-like entities. The test is essentially a measure of oral vitamin B_{12} absorption. Thus, when the tissues are saturated with B_{12}, additional B_{12} administered by the oral route will be excreted in the urine if it is absorbed by the intestine, but will not be excreted in the urine if it is not so absorbed. The test consists, therefore, of administering a large dose of B_{12} intramuscularly and at the same time giving the patient a small dose of radioactive B_{12} by mouth. Failure to recover at least 5 per cent of radioactivity in the urine during the next 24 hours indicates inadequate intestinal absorption, which could be due either to intestinal malfunction (sprue) or failure of the stomach to produce intrinsic factor (classical pernicious anemia). Adequate recovery of radioactivity in the urine in a patient with a pernicious anemia-like blood and bone marrow picture would indicate that the patient is suffering from nutritional B_{12} or folic acid deficiency. Treatment in such cases would consist of adequate oral intake of these agents. The danger of folic acid administration in pernicious anemia has been well documented. It is now also realized that it is dangerous to administer folic acid routinely to well people; if they later develop pernicious anemia the folic acid will hide the anemia and will result in severe neurological disease. On the other hand, large doses of folic acid are often needed in sprue and in pernicious anemia of pregnancy, and small doses (one mg. per day) in nutritional pernicious anemia-like states.

Hemolytic Anemias: The life span of the normal red cell is approximately 100 days. This means that in the normal individual one per cent of the circulating red cells are destroyed each day and that a similar number is released into the blood stream from the bone marrow daily. The rate of replacement is readily measured by the reticulocyte count. These cells normally make up one per cent of the circulating red cells. If there is excessive destruction of the red cells, the bone marrow will attempt to compensate for this by increasing the numbers of young blood cells released into the circulation. The bone marrow is capable of regenerating red cells at seven times the normal rate. Therefore, if excessive blood destruction (hemolysis) exists, the

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patient will not become anemic until the rate of destruction exceeds seven times the normal. Up to this level, the reticulocyte count rise is proportionate to the degree of blood destruction, so that at a red blood cell destruction of seven times the normal rate, the reticulocyte count will be 7 per cent and the patient will not be anemic. At this level the life span of the red cell is 1/7 of 100 days, i.e. approximately two weeks.

The most common forms of hemolytic anemia are basically of three types. The first is congenital hemolytic anemia, now usually referred to as congenital spherocytosis. The second is acquired hemolytic anemia. The third is hemolytic anemia secondary to some other condition usually associated with a large spleen and multiple transfusions, such as severe Mediterranean anemia mentioned above. Contrary to the usual assumption, hemolytic anemia need not be severe, nor is it usually associated with either clinically recognizable jaundice or splenomegaly. In the congenital type, the anemia is usually mild during remissions and severe during the short-lived crises. The anemia is due to a congenital defect of the red cell membrane which, however, is not present in all the red cells of any given patient. The affected cells are recognized as spherocytes in the blood smear and usually make up about 25 per cent of the circulating red cells.

When cells are destroyed very rapidly by the spleen, the bone marrow is called upon to replace red blood cells at a more rapid rate than in the normal individual. This rapid regeneration is recognized by a reticulocytosis of 7 per cent or more. Even if in congenital hemolytic anemia red cell destruction occurs at seven times the normal rate, reducing red cell survival from a normal 100 to 14 days, the bone marrow can compensate for this and such patients will have normal hemoglobin values with a reticulocyte count of 7 per cent. In the vast majority of patients with congenital hemolytic anemia, such a compensated state occurs. Hence, the majority of patients with congenital hemolytic anemia are either not anemic or suffer only from slight anemia, but have a reticulocytosis of 7 per cent or slightly more. Splenomegaly, however, occurs in the majority of these cases. Congenital hemolytic anemia is frequently not recognized until complications have occurred. The condition may be recognized during a routine physical examination by inspection of a blood smear, noting the presence of spherocytes; the diagnosis can then be confirmed by a reticulocyte count.

The most serious complication of congenital spherocytosis is the crisis. This has been shown to be due not to acceleration of the hemolytic process, but to temporary bone marrow depression, usually following a mild virus infection. It is thought that virus infections generally depress the bone marrow; since the red cell turnover in the normal individual proceeds at a very slow rate, no significant anemia results. In the patient with congenital hemolytic anemia, however, with a seven times normal rate of regeneration, the same degree of bone marrow depression results in severe anemia. Because the crisis is due to bone marrow depression rather than excessive hemolysis, patients in crisis do not have any increase in jaundice nor a further increase in reticulocytes. As a matter of fact, the bone marrow depression results often in a reduction of reticulocytes and the disappearance of the characteristic spherocytes. Thus, the recognition of congenital hemolytic anemia in crisis is difficult and the diagnosis is frequently missed. In addition to crisis, the complications of congenital hemolytic anemia include gall bladder disease at an early age due to excessive pigment turnover, and ulcers or abnormal pigmentation in the legs the mechanism of which is obscure. These findings should arouse a suspicion of congenital hemolytic anemia. Splenectomy prevents the complications of this disease, although it does not affect the basic cause.

In acquired hemolytic anemia the cause of hemolysis is not a congenital defect of the red cell membrane but an acquired antibody which apparently coats the patient's red cells and makes them more susceptible to destruction in the spleen or other vascular beds such as possibly the lung and the liver. Only very rarely can serum from a patient afflicted with hemolytic anemia actually be shown to cause agglutination or hemolysis of red cells. For clinical purposes, however, demonstration of the antibody of acquired hemolytic anemia is accomplished by the Coombs test. The Coombs serum is prepared by injecting a rabbit with human globulin. The rabbit then produces an antibody to the human globulin and the serum of such sensitized rabbits, which contains this antibody to human globulin, is the Coombs serum. In acquired hemolytic anemia, when the patient's cells are exposed to the Coombs serum, agglutination of these cells results. It is assumed that the red cells are coated with antibody which, being a globulin, is attacked by the globulin antibody in the Coombs serum with resulting agglutination of the cells. While there are many theoretical objections to this theory of the mechanism of the Coombs test, the theory is a clinically useful explanation of both the Coombs test and the mechanism of acquired hemolytic anemia. In order to diagnose acquired hemolytic anemia, a positive Coombs test is essential. In the performance of the test, before the red cells are mixed with the Coombs serum, they must first be repeatedly re-suspended in saline solution to remove all traces of serum from the mixture, since otherwise the Coombs serum will attach itself to the globulins in solution rather than to the globulins coating the red cells. For this

reason, the test is not suitable for office use.

Acquired hemolytic anemia is usually recognized when there is severe anemia, slight jaundice, and a positive Coombs test. There is always marked reticulocytosis. Transfusions are of questionable value and may even be dangerous because the transfused cells are hemolyzed, thus adding to the difficulty of bilirubin metabolism and even causing hemoglobinemia and renal shutdown. This is in contrast to the situation in congenital hemolytic anemia, where transfusions are useful since only the patient's own cells are subject to hemolysis, and transfused cells are not hemolyzed. Steroids almost always produce a remission of the disease, but complete recovery is very rare. A compensated state with no, or very little, anemia and moderate reticulocytosis is common after an acute attack even after treatment has been discontinued. There may even be no hemolysis at all. Yet, the Coombs test remains positive and such patients are subject to recurrence of severe hemolytic crises. Splenectomy sometimes results in considerable amelioration of the disease, but should not be done unless there is evidence that most of the hemolysis takes place in the spleen. A patient cannot be considered cured unless the Coombs test remains negative after treatment has been discontinued.

The use of red cell survival test. Diagnosis and treatment of hemolysis: Until approximately five years ago, the determination of red cell survival was a cumbersome procedure and depended upon injecting into the patient large amounts of blood from a donor with another blood group without at the same time producing a transfusion reaction. Thus, by transfusing an A patient with O blood and then doing red counts using A antiserum, the nonagglutinated red count served as a measure of survival of the transfused cells. More recently, it has been shown that radioactive chromium will attach itself to red cells. As these red cells are destroyed, the radioactive chromium is released and excreted in the urine. The test is performed by taking 50 cc. of either the patient's or a compatible donor's blood, incubating it with radioactive chromium, adding vitamin C to reduce the chromium not bound to the red cell (thus facilitating its immediate excretion), and then injecting the blood into the patient. Following the injection, blood samples are taken from the patient, the first one usually after about an hour, and subsequent ones depending on the presumed life span of the injected cells. When all the specimens have been collected, their radioactivity is determined, a graph constructed, and from this the life span of the injected red cells is calculated. Three factors cause progressive decrease in the radioactivity of the blood samples drawn. These are: (1) the decay of the radiochromium (2) the elution of chromium from the red cells (3) the destruction of the red cells. In plotting the survival curve, a correction is always made for the radioactive decay, but practice varies with regard to elution. Because of these factors, red cells survival by the radioactive chromium method does not follow a straight line and is somewhat less than 100 days. To avoid this difficulty, red cell survival is expressed in terms of half life, which for radiochromium is between 40 and 45 days. A half life of six days, for instance, would indicate red cell destruction at seven times the normal rate and would ordinarily be an indication of a compensated hemolytic anemia with the patient not anemic and having a reticulocyte count of 7 per cent. The clinician must usually decide at what intervals blood samples should be drawn; whether to use patient or donor blood, and to assure that the blood used is re-injected within a few hours after it has been obtained. It is clear that for a suspected life span of 14 days, as occurs in compensated hemolytic anemia, radioactivity will have disappeared after about 10 to 12 days; hence, there is no need for drawing blood samples beyond this period, and enough samples must be drawn during this period to allow a graph to be constructed. As to the choice of patient or donor blood to be used for the test, the following considerations will usually be helpful in making a proper decision. In acquired hemolytic anemia both patients' cells and donors' cells are subject to hemolysis, while in congenital hemolytic anemia only the patient's cells will be hemolyzed. Thus, if in a patient with congenital hemolytic anemia an attempt is made to determine red cell survival by injecting labeled donor's cells, the life span of these cells will be normal, the radioactivity will persist for approximately 45 days, and no new test using patient's cells can be done until after this period. On the other hand, if in a patient with chronic hemolytic anemia red cell survival is measured by using his own cells, the label will disappear in approximately 10 to 14 days and another test with donor cells should then be performed. Thus, if it is known that the patient hemolyzes, determination of red cell life span with donor cells can be performed to rule in or out acquired hemolytic anemia. If survival is normal, then the patient has congenital hemolytic anemia and splenectomy should be done. If on the other hand, it is not clear whether the patient has hemolysis or not, then his own cells should be used first. If this test shows that hemolysis is present, another test with donor cells can be performed two weeks later.

SPORTS INJURY CONFERENCE

MONDAY, SEPTEMBER 11

Fiske Fund Prize Dissertation

1961

The Trustees of the Fiske Fund of The Rhode Island Medical Society announce the following subjects for the Prize Dissertation of 1961:

"Recent Advances in the Treatment of Malignant Disease"

* * *

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For the best dissertation on either subject worthy of a premium they offer the sum of three hundred dollars ($300.00). The dissertation will be particularly graded on the basis of original work by the author. Each competitor for the premium is expected to conform with the following regulations:

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Editorials

A.M.A. AND ITS AUXILIARY HONOR RHODE ISLANDERS

As one of the smallest segments in the American Medical Association the Rhode Island constituency seldom is in a position to place any of its members in top positions in the administrative framework of the organization. But at the recent June session — the 110th annual meeting of the American Medical Association — two Rhode Islanders, Doctor Charles J. Ashworth and Mrs. H. Frederick Stephens — won outstanding recognition.

Doctor Ashworth, president of Physicians Service, a past president of the Society, and for seven years a delegate to the A.M.A. from our Society, was elected by the House of Delegates to a five-year term as a member of the important A.M.A. Council on Medical Service which concerns itself with such problems as those of care for the aged, indigent care programs, voluntary prepayment and insurance plans, maternal and child care, and federal medical facilities and services. The outstanding work done at our local level on many of the issues now of national concern give Doctor Ashworth a fine background for his new assignment which we feel certain he will discharge with distinction both to himself and the medical profession of Rhode Island.

Eastern regional chairman for civil defense for the Woman's Auxiliary of the American Medical Association during the past year, Mrs. Stephens proved in no uncertain manner that she has the ability to head the national committee of the Auxiliary to which she was elected in June. Our current era of *easy living* tends to deaden interest in the ever present threat of nuclear war and the need for adequate civilian defense measures. We shall look to enthusiastic and devoted workers such as Mrs. Stephens to bring the problem into clearer focus for every citizen in the coming months.

UNDERGROUND INSTALLATION OF UTILITY LINES

In this year's session of the Rhode Island legislature Resolution H1583 was passed creating a special commission of the House of Representatives to study the feasibility and advisability of the underground installation of power and telephone lines. The reasons for the formation of the commission concerned the great inconvenience and monetary loss to consumers of these respective utilities when winter storms and high winds of other seasons cause interruptions of service of electricity and telephones.

Each year in Rhode Island there are one or more interruptions of telephone and electrical service caused by severe storms, resulting in tremendous inconvenience, financial loss, and danger to life and limb. The telephone and electrical equipment used to carry the overloaded wiring through the streets of the towns and cities of this state is in poor general condition. The trees lining our streets have to be mutilated every year so as to avoid interference with this wiring. The expense of pruning the trees throughout the state is undoubtedly tremendous.

In the Providence Journal of May 25, 1961 there was a brief news story concerning an official of the New England Telephone and Telegraph Company who stated that the company planned to bury more than 23,000 feet of cable in four new property developments in East Providence within the next year. It was noted in this same article that this could be done as economically as the stringing of an aerial cable. This indeed is a step in the right direction!

Perhaps the first editorial mention of this problem was in the Rhode Island Medical Journal of April 1959, following the severe ice storm of February 10, 1959, when the suggestion was advanced that underground installation of electric and telephone wires would eliminate the interruption of the services by storms, and the question was posed that in spite of the expense involved in such a transfer, "by what method can one measure the money cost against the loss of property and the danger to human life and health which occur in Rhode Island several times each year?"

We wish the best of luck to this special commission, and we shall back their constructive efforts most sincerely. Perhaps the most important help in this matter would come from the thousands of alarmed and disgruntled housewives who once or more times each year have to maintain their families without electricity or telephone service.

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RELATIVE VALUE FEE SCHEDULES

The California Medical Association seven years ago was the first to apply a unit method to the determination of fees. At the present time relative value fee schedules are used by the medical societies in thirteen states and the District of Columbia, and by sixteen Blue Shield Plans.

In a press release dated April 24, 1961, from National Blue Shield headquarters in Chicago, it was reported that "Blue Shield Plans will soon offer an entirely new uniform program on a nationwide basis when a proposal adopted at the annual national meeting of the Blue Shield Association held in Chicago on April 16-18 is implemented in the near future." The release went on to explain that "this method of developing benefit schedules was urgently needed to enable Blue Shield to offer a uniform program of coverage to companies operating on a nationwide basis." It was asserted "that the new nationwide program would be available in addition to existing Blue Shield offerings for local groups," and it was further "stressed that the new basis for developing programs to meet the needs of national accounts would in no way conflict with local Plan operations." "Instead," it was stated, "the new national Blue Shield program would simply extend the capability of individual plans to serve national accounts on a more competitive and realistic basis than is presently possible under the more or less inflexible system of attempting to fit varying local programs to a situation in which uniformity is essential."

It seems quite probable that the governing body of the local Blue Shield plan, the Rhode Island Medical Society Physicians Service, will be asked to take a stand in this matter before early fall, or soon thereafter. Despite the statement that this new procedure "would in no way conflict with local Plan operations," experience in the past would indicate that this prediction is misleading. In these matters a sort of Gresham's law operates. Witness the recent adoption of a federal employees plan with more favorable income limits than the local plan and its immediate application to all Physicians Service contracts in the area. It is much more likely that the reverse of the above prediction will prove true.

It is not possible at this writing to predict what position would be taken in the matter of relative value fee schedules by the House of Delegates of the Rhode Island Medical Society. It would seem highly desirable, however, for the Society very soon to give this important impending change mature consideration and take an official stand before it is a fait accompli.

IN THE INTEREST OF PUBLIC HEALTH

The controversy being waged over subsidized medical care finds Washington split into at least two camps. And because of that division there is often more heat than light, more rancor than reason, more concern for this pet idea than consideration for the persons most involved.

An example of the heat *versus* light phases of the controversy is found in the assertion of an advocate of socialized medicine. He insists the American Medical Association has been trying to frighten the American people by describing government paid medical benefits to everyone drawing benefits as "socialized medicine" and that the medical profession is opposed to socialized medicine. That he is off base should be obvious to all.

The A.M.A. has effectively replied to its critic and his effort to impugn the motives and integrity of America's physicians. On specific grounds the doctors answer the lobbyist's claim the medical care for the aged-social security bill does not refer to doctors. The bill definitely includes physicians. It specifically includes internes, resident physicians, pathologists, radiologists, psychiatrists, anaesthesiologists working in the hospitals. Another false claim from the advocate of "socialized medicine": The bill does offer free choice of hospital and physician. That is wrong, because only hospitals signing contracts with the government would be available to patients. If the only hospital in a community was not approved by the secretary of Health, Education and Welfare, local patients would be forced to seek hospitalization elsewhere. That fact hardly sustains the idea of free choice.

Those who are pushing loud and long for government medical care, are, in their blind crusade, unable to see that doctors are concerned with their patients, and because of that concern rightfully warn the public of any proposal which, in their honest opinion, would endanger the quality of medical care, as subsidized medicine would.

... Editorial reprinted from the
Pawtucket Times of July 6, 1961

REPORT ON THE ACTIONS OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION

110th Annual Meeting, New York, New York, June 25-30, 1961

CHARLES J. ASHWORTH, M.D., *Delegate,* AND ARTHUR E. HARDY, M.D., *Alternate Delegate,*
OF THE RHODE ISLAND MEDICAL SOCIETY

ONE OF THE RESOLUTIONS presented to the House of Delegates from Utah proposed a nation-wide poll by the A.M.A. of all doctors in this country, asking them to state whether or not they wish to be covered under Social Security. A substitute resolution reaffirming the A.M.A.'s previous position of opposition to compulsory inclusion of physicians under the Social Security system was voted and approved by a large majority. This is the first time that such a vote has been taken by the delegates on this specific question, and the wish of the Rhode Island doctors was registered not only before the Reference Committee, but by a vote on the floor of the House for inclusion, as directed by the House of Delegates of the Rhode Island Medical Society. Approximately six states were ordered to register a vote for this inclusion, but an overwhelming majority of doctors in this country are opposed, as reflected in the vote of the House of Delegates.

Doctor George M. Fister of Ogden, Utah, member of the A.M.A. Board of Trustees and previously a member of the House of Delegates, was named president-elect of the Association. Doctor Fister will become president at the June, 1962, annual meeting in Chicago, succeeding Doctor Leonard W. Larson of Bismarck, North Dakota, who assumed office at the Tuesday night inaugural ceremony in New York.

The A.M.A. 1961 Distinguished Service Award was voted to Doctor Walter H. Judd of Minneapolis, physician and member of Congress, for his contributions as a medical missionary, humanitarian and statesman devoted to world peace.

Osteopathy, medical discipline, communications, surgical assistants, drug legislation, general practice residencies, relations with allied health professions and services, and poliomyelitis vaccine were among other subjects covered by 115 resolutions and 28 reports acted upon by the House of Delegates at the American Medical Association's 110th Annual Meeting held June 25-30 in New York City.

Osteopathy

In considering a report of the Judicial Council and three resolutions on the subject of osteopathy, the House of Delegates agreed with the intent of the report and resolutions, but instead adopted the following statement of A.M.A. policy:

"1. There can never be an ethical relationship between a doctor of medicine and a cultist, that is, one who does not practice a system of healing founded on a scientific basis.

"2. There can never be a majority party and a minority party in any science. There cannot be two distinct sciences of medicine or two different, yet equally valid systems of medical practice.

"3. Recognition should be given to the transition presently occurring in osteopathy, which is evidence of an attempt by a significant number of those practicing osteopathic medicine to give their patients scientific medical care. This transition should be encouraged so that the evolutionary process can be expedited.

"4. It is appropriate for the American Medical Association to *reappraise its application of policy* regarding relationships with doctors of osteopathy, in view of the transition of osteopathy into osteopathic medicine, in view of the fact that the colleges of osteopathy have modeled their curricula after medical schools, in view of the almost complete lack of osteopathic literature and the reliance of osteopaths on and use of medical literature, and in view of the fact that many doctors of osteopathy are no longer practicing osteopathy.

"5. Policy should now be applied individually at state level according to the facts as they exist. Heretofore, this policy has been applied collectively at national level. The test now should be: Does the individual doctor of osteopathy practice osteopathy, or does he in fact practice a method of healing founded on a scientific basis? If he practices osteopathy, he practices a cult system of healing and all voluntary professional associations with him are unethical. If he bases his practice on the same scientific principles as those adhered to by members of the American Medical Association, voluntary professional relationships with him should not be deemed unethical."

Medical Discipline

In a major move designed to strengthen the profession's disciplinary mechanisms, the House

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approved the conclusions and recommendations of the Medical Disciplinary Committee, with only three word changes. The House discharged the committee with thanks and commendation and directed that its functions be assumed as a continuing activity of the Judicial Council.

One recommendation suggests that "The bylaws of the American Medical Association be changed to confer original jurisdiction on the Association to suspend or revoke the A.M.A. membership of a physician guilty of a violation of the principles of medical ethics or the ethical policy of the American Medical Association regardless of whether action has been taken against him at local level."

Another "encourages and urges that each state association report annually to the American Medical Association all major disciplinary actions taken within its jurisdiction during the preceding calendar year."

The report urged state and county medical societies to utilize grievance committees as "grand juries" to initiate action against an offender so as to obviate the necessity of making an individual member of a medical society complain against a fellow member.

The House suggested that each medical school develop and present a required course in ethics and socio-economic principles, and that each state board of medical examiners include questions on ethics and proper socio-economic practices in all examinations for license.

The report concluded with a recommendation that "American medicine at the national, state and local level maintain an active, aggressive and continuing interest in medical disciplinary matters so that, by a demonstration of good faith, medicine will be permitted to continue to discipline its own members when necessary."

Polio Vaccine

The House approved a report by the Council on Drugs on the present status of poliomyelitis vaccination in the United States and urged that it be made available to all physicians through the most effective communications media. The report clearly outlines procedures recommended for implementation of mass vaccination with the new oral vaccine when it becomes available. The House complimented the Council on its "clear and succinct statement on the initiation of the new campaign which will be needed to promote the new vaccine." The House agreed that the report provides the practicing physician with a reliable series of answers to the many questions which will arise during the change-over from Salk vaccine to oral vaccine. The report emphasizes, however, that "physicians should encourage, support and extend the use of Salk vaccine on the widest possible scale at least until the oral polio-virus vaccines currently under development and clinical trial become available."

General Practice Residencies

Eight resolutions were introduced on the subject of creating new two-year, residency training programs in general practice. The House agreed that there appears to be a need for such programs for those individuals who desire more experience in obstetrics and surgery than may be available in the currently existing Family Practice Program. It approved a substitute resolution directing the Council on Medical Education and Hospitals to consider for approval other two-year programs in general practice which incorporate experience in obstetrics and surgery. The Council will review these programs on the basis of their individual merits and conduct a long-range evaluation of the new programs as well as the previously established Family Practice Programs.

Surgical Assistants

In considering a Board report and two resolutions on the subject of surgical assistant's fees, the House approved the following five basic principles developed by the Judicial Council and the Council on Medical Service:

"1. Each member of the A.M.A. is expected to observe the Principles of Medical Ethics in every

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aspect of his professional practice.

"2. Each doctor engaged in the care of the patient is entitled to compensation commensurate with the value of the services he has personally rendered.

"3. No doctor should bill or be paid for a service which he does not perform; mere referral does not constitute a professional service for which a professional charge should be made or for which a fee may be ethically paid or received.

"4. It is ethically permissible for a surgeon to employ other physicians to assist him in the performance of a surgical procedure and to pay a reasonable amount for such assistance.

"This principle applies whether or not an assisting physician is the referring doctor or whether he is on a per-case or full-time basis. The controlling factor is the status of the assisting physician. If the practice is a subterfuge to split fees or to divide an insurance benefit, or if the physician is not actually employed and used as a bona fide assistant, then the practice is contrary to ethical principles.

"5. Under all other circumstances where services are rendered by more than one physician, each physician should submit his own bill to the patient and be compensated separately."

Relations with Other Professions and Services

The House considered a Board report and twelve resolutions dealing with various aspects of medicine's relationships with allied health professions and services, including optometry. The Board report recommended the creation of a new A.M.A. Council to handle all the problems involved. The House, however, accepted a reference committee suggestion for establishment of a new Commission to Co-ordinate the Relationships of Medicine with Allied Health Professions and Services. The Commission will be composed of seven members appointed by the speaker of the House. Subcommittees, composed of from three to five members selected by the Commission from lists of names submitted by the scientific sections, will consider problems in specific areas. The Commission will correlate and catalogue the reports of the subcommittees and will act as a liaison agent between the subcommittees and those A.M.A. Councils where there may be overlapping interests.

Communications

Acting upon four resolutions related to the Association's public relations program, the House adopted a substitute resolution directing the speaker of the House of Delegates to name seven elected members of the House as a special committee "to study and continually advise the Board of Trustees on the broad planning and co-ordination of all phases of communications of the American Medical Association, so that the public and the members of the medical profession are properly and adequately advised of the policies and concern of the medical profession with respect to all phases and aspects of medical care for all people."

The House agreed with a reference committee opinion that "we have a very adequate division within the A.M.A. capable of implementing any program of communications." The approved committee report also said that "the Communications Division of the A.M.A. needs the active support and co-operation of the House and of all members of the Association."

The House strongly endorsed a Board report which pointed out the problems that would result from amending the Food, Drug and Cosmetic Act to authorize the Food and Drug Administration to determine the efficacy, as well as the safety, of a prescription drug prior to the approval of a new drug application. The A.M.A. will oppose such legislation before the Kefauver Committee, the report pointed out, on the basis that "a decision with respect to the effectiveness of drugs is dependent upon extended research, experimentation and usage." The House agreed that vesting such authority in the Food and Drug Administration would operate to limit research, the marketing of drugs

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and the exercise of discretion by the medical profession. "The marketing of a relatively useless drug is infinitely less serious than would be the arbitrary exclusion from the market of a drug that might have been life saving for many persons," the House declared.

Miscellaneous Actions

In dealing with resolutions and reports on a wide variety of other subjects, the House also:

Approved the *Guides to Physician Relationships with Medical Care Plans*, submitted by the Council on Medical Service, with these two changes: deletion of item 5 under "Responsibilities of the Medical Society," which said "To recognize that properly qualified physicians employed by, or otherwise serving, medical care plans should not be denied professional rights and privileges because of their service to such plans," and addition of a new item 1 under "Responsibilities of the Medical Care Plan," which reads: "To provide the beneficiary of the plan with free choice of qualified physicians";

Reaffirmed its support of the *Kerr-Mills* program for the needy and near-needy aged and its opposition to any legislation of the *King-Anderson* type, declaring that the medical profession "will not be a willing party to implementing any system which we believe to be detrimental to the public welfare";

Approved a markedly expanded *drug information program* submitted by the Board of Trustees and the Council on Drugs;

Adopted the final report of the Special Study Committee of the Council on Medical Education and Hospitals and recommended that copies be sent to all medical school deans in the United States;

Decided to hold the *1963 Clinical Meeting* in Portland, Oregon, instead of Las Vegas, Nevada, as recommended by the Board;

Approved a plan by the new A.M.A. Department of International Health to co-operate in the recruitment of volunteer physicians for emergency medical service in *foreign mission fields;*

Agreed to an increase of $20 in the annual A.M.A. *membership dues* to be implemented over a period of two years: $10 on January 1, 1962, and $10 additional on January 1, 1963;

Discontinued the Association's General Practitioner of the Year award;

Opposed legislative and administrative mandates which would compel physicians to prescribe drugs, or require pharmaceuticals to be sold, by *generic names* only;

Reaffirmed the Association's opposition to compulsory inclusion of physicians under the *Social Security* system;

Urged immediate legislation that will provide strong economic motivation for the construction and maintenance of *fallout shelters;*

Disapproved two resolutions which would have discontinued the scientific activities at the *Clinical Meeting;*

Urged *immunization campaigns* against both tetanus and influenza, and

Asked state and county medical societies to give full support to the *First National Congress on Medical Quackery* to be jointly sponsored next October 6-7 in Washington, D.C., by the A.M.A. and the Food and Drug Administration.

Election of Officers

In addition to Doctor Fister, the new president-elect, the following officers were named at the Thursday session:

Doctor Eustace A. Allen of Atlanta, Georgia, vice president; Doctor Norman A.Welch of Boston, re-elected speaker of the House, and Doctor Milford O. Rouse of Dallas, Texas, re-elected vice speaker.

Elected to the Board of Trustees were Doctor Wesley W. Hall of Reno, Nevada, to succeed Doctor Fister; Doctor Homer L. Pearson, Jr., of Miami, Florida, to replace Doctor Julian P. Price of Florence, South Carolina, and Doctor Charles L. Hudson of Cleveland, Ohio, to fill out the term of the late Doctor Cleon A. Nafe of Indianapolis. The Board named the following officers: chairman, Doctor Hugh Hussey of Washington, D.C.; vice chairman, Doctor Percy Hopkins of Chicago, and secretary, Doctor James Z. Appel of Lancaster, Pennsylvania.

Named to the Judicial Council were Doctor Robertson Ward of San Francisco, to succeed himself, and Doctor Elmer G. Shelley of North East, Pennsylvania, to replace Doctor Pearson.

Re-elected to the Council on Constitution and Bylaws was Doctor Walter E. Vest of Huntington, West Virginia.

New Members of the Council on Medical Service are Doctor Charles Ashworth of Providence, Rhode Island, succeeding Doctor Carlton Wertz of Buffalo, New York, and Doctor Burtis E. Montgomery of Harrisburg, Illinois, to succeed Doctor Charles Hudson of Cleveland.

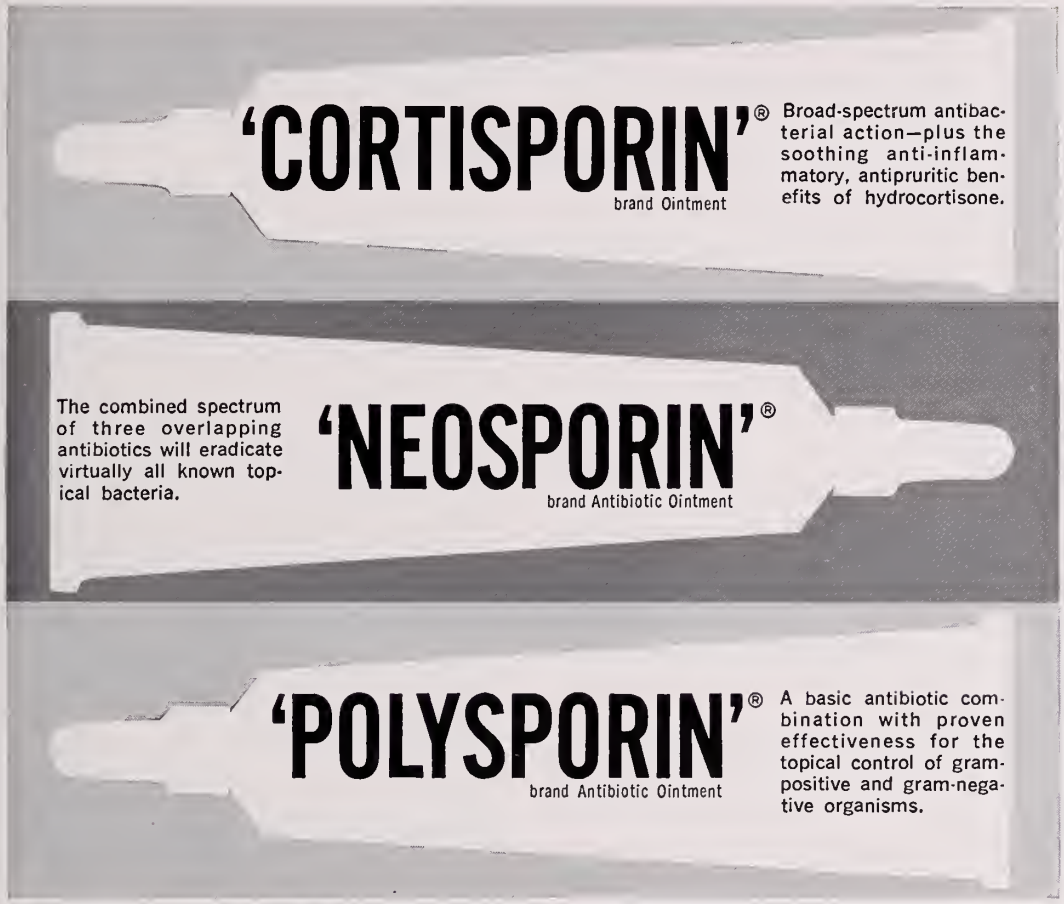
For the Council on Medical Education and Hospitals, Doctor Dwight L. Wilbur of San Francisco was elected to succeed Doctor John W. Cline of the same city, and Doctor Kenneth C. Sawyer of Denver, Colorado, was named to succeed Doctor Guy A. Caldwell of New Orleans.

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INDICATIONS FOR REFERRALS TO OUT-PATIENT PSYCHIATRIC CLINICS*

CHARLES H. JONES, M.D.

The Author. *Charles H. Jones, M.D., of Providence, Rhode Island. Superintendent, Butler Health Center, Providence, Rhode Island.*

THE TASK of discussing the role of psychiatric out-patient clinics in the community has been undertaken with the anticipation that this role might be as nebulous and controversial in Rhode Island as is frequently seen in so many other states. Perhaps the reason I have been asked to discuss this subject is the fact that I am a recent arrival in the state and might take an objective approach. That I have been prejudiced in respect to out-patient clinics for some time is, however, the case. For in my home state of Washington, such centers are regarded with suspicion and distrust by most physicians. As a consequence, very few exist and, with the exception of two county hospitals, no general hospital operates a psychiatric clinic. As a state hospital superintendent, I have been annoyed over the years by attempts of the Washington State Health Department to have laws enacted which would grant jurisdiction over all patients released from state institutions to local or regional clinics operated by that department. I have preferred to work out plans for the supervision of released patients directly with private physicians and non-medical agencies.

On the basis of my background, it is understandable that since becoming superintendent of Butler Hospital a year ago I have been more attentive to the in-patient service and the day-care program than to the out-patient service. This policy has been followed in spite of the fact that the out-patient service was the first to be organized when the hospital reopened in 1957. An American Psychiatric Association report had recommended that such a service would be helpful in overcoming one of Rhode Island's marked deficiencies. In spite of my relative inattention the out-patient service grew in 1960 by 30 per cent in terms of 3,389 visits compared to 2,602 visits in 1959.

Therefore, in order to run the Out-Patient Service at Butler Hospital in a manner complementing the efforts of private physicians and other agencies, and in order to write this paper, inquiries were sent to all hospitals or agencies in Rhode Island engaged in out-patient psychiatric services. Comments were requested from each chief of service and each chief social worker as to what local ground rules might have been developed over the years, particularly economic and other criteria for acceptance of referrals. Replies were received from all organizations and, with few exceptions, from both psychiatrist and social worker. Replies were such that the following excerpts can serve to describe referral policies and the variety of services available.

Doctor Henry B. Elkind writes: "Patients eligible for treatment in the Veterans Administration Regional Office must have a disability incurred in or aggravated by service in the armed forces in time of war. This eligibility requirement applies whether the patient is seeking out-patient medical or neuropsychiatric treatment. . . . Economic status is not disqualifying. Referrals may come from patients themselves, from other components within the Veterans Administration, from hospitals within the Veterans Administration program, private physicians, community health and welfare agencies whether public or private. If it is found that the patient is ineligible for out-patient treatment, i.e., that his condition was not incurred in nor aggravated by wartime service, he is then referred to a community resource for the kind of treatment he requests."

At the Charles V. Chapin Hospital, "Any person of any age who is living in Rhode Island and unable to afford the services of a private doctor is eligible to come to the out-patient department. Determination of his inability to pay is made at the time of his first clinic visit. Sources of referral include private practitioners, social workers, and by own request."

At the State Hospital for Mental Diseases, criteria for eligibility include previous hospitalization there, preferably within two years, and financial inability to obtain psychiatric care elsewhere. Sources of referral are the state hospital staff itself, community physicians, and social workers active with the family. It is the preference of the

*Presented at the 150th Annual Meeting of the Rhode Island Medical Society, at the Medical Library, Providence, Rhode Island, May 3, 1961.

hospital superintendent that patients be followed by community physicians. If such is not possible clinic care is prescribed.

Doctor Charles C. Goodman, chief clinical psychiatrist of the Rhode Island Mental Hygiene Services, writes that indications for referral to the Newport and the Warwick clinics of the agency as well as to services in Providence are identical. "Because someone has a 'problem' and contacts our clinic does not automatically make the problem psychiatric. Once contact is made the initial request is reviewed by a psychiatric social worker. If the problem presented is not all 'psychiatric' or in any way requiring further service from us some other appropriate disposition can usually be made at this point.

"If the presenting problem is psychiatric and warrants further service from us, a more formal psychiatric social work interview and history is provided by appointment. Following this, the situation is reviewed in regular screening conferences in which all members of the mental health team participate under the direction of the physician in charge of the service."

The Chief Psychiatric Social Worker of the Mental Hygiene Services reports: "Since there are no provisions for fee charging at this clinic, patients are confined to those who cannot afford private care. No stringent means test is applied; but consideration is given to the amount of income, the size of the family, and family obligations. While many people who come here are from borderline or dependent economic situations, some who are seen on a more prolonged basis may be of slightly higher socio-economic levels. Because there is quite a wide gap between no fee and payment of full private fee, consideration is currently being given to devising a fee schedule. We feel that this is sound both financially and therapeutically.

"The Warwick Clinic operates on a somewhat different basis than the Mental Hygiene Services in Providence in that it is under local auspices with Mental Hygiene Services providing the professional staff. Therefore, its services are made available to the citizens of Warwick at a nominal charge of $3.00 per visit. Nobody is refused help if it is shown that he is unable to afford this amount. The funds are used to help defray ... administrative costs."

Doctor Antonio Capone reports: "The Division of Alcoholism operates an Out-Patient Clinic at 94 Doyle Avenue. We have an open-door policy meaning that anyone can apply for help by calling in person without an appointment or by telephoning for an appointment during working hours. The drinker, his family, employer, clergyman, physician and others associated with the drinker may apply for help. The person applying is seen by the intake social worker, then by a psychiatrist and a decision is made as to treatment plan according to physical and mental condition of the patient. ... Consultation services are provided for families and the general public. Chapter Twelve of Rhode Island General Laws, 1956, states: 'Any person may voluntarily request diagnosis and treatment from the facilities of the Division of Alcoholism. Such persons shall be selected according to policy established by the division. The Division of Alcoholism shall charge and accept payment for services rendered by it from patients obtaining its care. Fees may be adjusted in accordance with ability to pay but no person shall be refused services because of his inability to pay.' "

For the last fiscal year a total of three hundred and fifty-five patients were referred to the Division of Alcoholism. Of these, six were referred by physicians, two hundred and forty were from other state agencies, twenty-nine from private agencies, and the remaining eighty referred by friends, relatives, other patients, or not determined.

Fees for services charged by the Division of Alcoholism are ten dollars for the first day, five dollars for the second day, and three dollars each for subsequent visits. Individual treatment by psychiatrists costs five dollars per visit and interviews with ancillary personnel three dollars.

Doctor Laurence A. Senseman writes about the Out-Patient Department of Memorial Hospital: "This neuropsychiatric clinic has been in operation for many years. I have been in charge of it since 1946 and worked in it since 1938. The sources of referrals at the present time are from two places: One is follow-up care for those who have been admitted in the hospital and the second is from the general practice clinic (of the out-patient department). When inquiring about the general practice clinic I find that they will accept any patient who wants medical attention. This can be either from the private doctors, the family, or from agencies. They are referred to the neuropsychiatric clinic for follow-up. Many of the patients in this clinic are long-term treatment patients, such as those with epilepsy or chronic neurological conditions. Occasionally diagnostic problems will be examined."

The social service at Memorial Hospital reports: "Persons are eligible for treatment on an out-patient basis if they cannot afford services of a private psychiatrist. A financial history is taken when each patient is admitted, and this is rechecked yearly. However, occasionally an exception is made when medical expenses have caused dire hardships over a period of time."

A helpful report was made by Doctor Harold W. Williams, chief of neurology and psychiatry at the Rhode Island Hospital. "When viewed from the point of view of all aspects of medicine, the ground

continued on next page

rules here have been that clinics are primarily designed for the services of those who can't afford a private practitioner. The first break that I know of in these ground rules occurred in the field of psychiatry, and more particularly at Butler Hospital when somewhere in 1946 or 1947 they set up an out-patient department to care for psychiatric treatment of veterans which the local Veterans Administration could not handle by itself. From the economics of it, then, it was essentially a situation where an agency, in this instance a governmental agency, paid for the service as distinguished from an individual paying for the service." Doctor Williams points to a shifting of ground rules in areas other than psychiatry since that time, giving as examples the tumor clinic, the cardiac station, and the hearing and speech center at Rhode Island Hospital, which charge fees rather than having them charged by individual physicians. Doctor Williams also writes: "The Department of Neurology and Psychiatry at the Rhode Island Hospital has conducted an Out-Patient Department for those unable to afford private service. It antedates 1920 to the best of my knowledge. Chapin Hospital has long had an Out-Patient Service, again on the basis of those who could not pay. In all these situations, of course, the physicians gave of their own time. They received no compensation for their activity."

Doctor Thomas L. Greason reports: "Admissions through the Out-Patient Psychiatric Clinic at St. Joseph's Hospital are referred from the members of the staff of that hospital. Generally speaking, the referring physician feels that the economic status of the patient is such that he is unable to consider private psychiatric care. From 1947 to 1960 neuropsychiatric clinics were held two mornings a week. During these years about half of the clinic patients were individuals suffering from various types of epilepsy. The approximately fifty per cent of patients considered psychiatric fell into no specific category from the diagnostic point of view. If there was a common denominator among this group of patients, I would say that in addition to being in the lower economic strata, language difficulty and low intelligence level seemed to predominate. In the years between 1947 and 1960 I do not believe that I ever saw a patient in the clinic who would have been more appropriately treated in a private psychiatric setting."

Doctor Catherine Zouraboff, medical director of the Cranston Child Guidance Clinic, writes: "This clinic is operated as a unit of the Cranston School Department for the use of students enrolled in the system from kindergarten to high school. The children are referred by their individual schools or indirectly from parents, doctors, the juvenile court, and other state and private agencies. . . . Both children and their parents are seen at the clinic. And the clinic personnel keep in touch with both the teaching and the supervisory staff through personal contacts and by participation in our staff conferences."

The Chief Social Worker reports: "There is no economic criterion for eligibility and no fees are charged. Any Cranston public school child and his parents may avail themselves of our services, since the clinic is operated as a unit of and is financed by the Cranston School Department. The usual procedure is for a child's teacher to file an application for psychological services. The school psychologist, who also doubles as our clinical psychologist, sifts the referrals after testing. The next recommendation is for clinic help where it seems indicated. At this point the psychiatric social worker holds an intake appointment with the parents and financial determination regarding clinic attendance is made. . . . We are not rigid about the application procedure and accept referrals directly from parents, pediatricians, and other agencies when the need arises."

Doctor Hector Jaso reports: "The Providence Child Guidance Clinic is a psychiatric out-patient clinic for the study and treatment of emotionally disturbed children and their parents. Our professional staff consists of psychiatrists, psychologists, and psychiatric social workers. They use the clinical team approach in the study and treatment of our cases. The greatest portion of time is designated for long-term intensive treatment of the children and their families, with the parents and child being included at all times. In most instances, treatment consists of separate weekly therapy hours for the child and the mother and the father, along with group therapy sessions for either or both parents. This team approach involves frequent team meetings and discussions in order to co-ordinate the total family treatment."

The social worker states: "Since the clinic is mainly supported by the United Fund of Rhode Island, only families who live within the area covered by the fund are eligible. Our upper age limit for eligibility is sixteen years. Fees are charged in accordance with the family's ability to pay. The weekly treatment rate according to a set schedule, based on income and number of dependents, starts at one dollar and goes up to twenty-five dollars, this being based on incomes ranging from twelve hundred dollars to twelve thousand dollars per year. Families who receive public assistance as their sole means of support are not eligible for clinic treatment. The majority of referrals to the clinic come from local physicians, mostly pediatricians, with sixty-three per cent of our total referrals in 1960 coming from this source. The remaining sources are fairly evenly divided amongst schools, social service agencies, court, clergy, and self referrals."

Doctor Gunnar Nirk reports for the Emma Pendleton Bradley Hospital: "The clinic associated with Bradley Hospital operates like a regular child guidance clinic. We offer diagnostic and treatment services for children and adolescents. Parents are also involved either in case work, individual, or group therapy. Consultations on specific cases or on general community mental health problems are offered to schools and other caretaking agencies. We accept children with many different kinds of problems, the main question being whether, in our opinion, the problem is amenable to treatment by an out-patient approach."

The chief of Psychiatric Social Work at Bradley states: "Presently our rates are $6.25 per interview, per person. Therefore, if a child were seen by our psychiatrist and the mother by a social worker, the fee for that joint visit would be $12.50. The other criteria are quite flexible, the notion being here that those in our profession and allied professions will have the clinical awareness to realize which type of problem is amenable to out-patient approach and which would require hospitalization. We are considering changes in our out-patient center policy to make it more community oriented."

Common Theme

One common theme runs through all of the above reports. Out-patient clinics were originally organized to provide psychiatric care for patients of limited means. In only Doctor Greason's report, however, is found the statement that determinations of need are made by referring physicians. No report outlines a precise formula for evaluating a patient's economic distress. What is need? What are limited resources? I have discussed these questions with several Rhode Island social workers and have learned that these professionals regard the determination of need as an art and not a science. I suspect that such determinations are for practical purposes on a relative basis with attention paid to the law of supply and demand. Allowing for individual errors in judgment, I suppose that free psychiatric services and those charged at a fraction of the cost of private care are now generally made available to that portion of the population least able to pay.

From the report it appears that a physician in private practice has little or no assurance a given patient referred to a clinic will meet financial criteria for acceptance. As a wide spectrum of policies for clinical and financial acceptance of patients is subjected to varying interpretations, a physician faces the problem of finding out on a trial and error basis what he might expect from different agencies.

The clinic method of providing psychiatric care is not necessarily the cheapest from a dollar and cents standpoint. Often when the total expenditures of a clinic are divided by the number of patient visits, the cost is found to be more than that charged by private psychiatrists, deficits being made up from charitable or governmental sources, or by donated time. On the other hand, an alternative to the private enterprise system of medicine would require a bureaucratic scheme of tremendous scope, with ultimate administrative costs markedly in excess of those now prevailing in the clinic system. There can be no question that if economic factors were totally eliminated from the distribution of medical care there would be no need for charitable out-patient clinic services. Private physicians could then accept psychiatric patients on the basis of relative clinical need alone.

Now that I have become oriented as to Rhode Island ground rules for out-patient clinics, I intend to develop services at Butler Health Center along the lines of treating those patients who are not, as yet, specifically or adequately provided for by other agencies, and who do not have means for indicated psychiatric treatment privately. This objective is in keeping with the recommendations of the American Psychiatric Association report advising that Butler Health Center reopen on a private basis, with the policies adopted by the Board of Trustees, and with the reports from existing clinics. In carrying out this objective, your advice, help, and good wishes are solicited.

ACTION FOR MENTAL HEALTH

concluded from page 460

[3]Peffer, P. A.; Margolin, R. J.; Stotsky, B. A.; Mason, A. S.: Member Employee Program. (Mimeo) Brockton (Mass.) VA Hosp., pp. 219

[4]Psychiatric Patients in General Hospitals. Joint Information Service Fact Sheet No. 13, Nov. 1960

[5]Action for Mental Health. Basic Books Co., N. Y., 1961

[6]Carse, J.; Panton, N. E.; Watt. A.: A District Mental Health Service. The Worthing Experiment. Lancet, Jan. 4, 1958 39-41

[7]Olshansky, S.; Grob, S.; Malamud, I. T.: Employers Attitudes and Practice in Hiring of Ex-Mental Patients. Ment. Hyg. 43:391, 1958

CRANIAL BONE CHANGES IN CONGENITAL HEART DISEASE

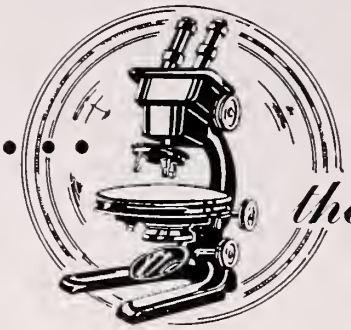
concluded from page 464

[14]Whipple, G. H., and Bradford, W. L.: Racial or Familial Anemia of Children — Associated with Fundamental Disturbances of Bone and Pigment Metabolism. (Cooley-Von Jaksch). Amer. J. Dis. Child. 44:336-365, 1932

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R. I. Blue Plans in the "Red" for First Five Months

The Rhode Island Blue Cross and Physicians Service Plans have recorded losses of $412,000 during the first five months of 1961, it was reported last month by Arthur F. Hanley, assistant director.

Losses by the plans during May alone totaled $131,276.74 for Blue Cross and $21,348.40 by Physicians Service. April losses by both plans totaled $122,800, and March losses were $162,000. January showed a loss of $67,000, but February showed a gain of $92,000.

"While the first six months of the year traditionally show greater use of health benefits than the second half of the year, our losses during this period are substantial," Mr. Hanley said.

The number of Blue Cross cases increased only slightly over last year — from 32,511 to 32,933. However, Physicians Service cases increased from 113,899 cases during 1960 to 116,716 during 1961.

Administration expense ratios of both plans were lower during this year than during 1960, Mr. Hanley reported.

* * *

Medical Economics Council to Advise on Local Hospital Planning

The Rhode Island Medical Economics Council is preparing to act as an advisory group for statewide hospital planning, Father Stephen K. Callahan, chairman, announced last month.

The effect of additional hospital facilities on the cost of health care is the latest activity of the group, representing doctors, hospitals, and Blue Cross-Physicians Service, which was initiated two years ago to study health cost problems and make recommendations to provide health service at the lowest possible cost, consistent with good medical care.

"Concern about the impact of additional hospital facilities is the next logical step after the question of proper utilization of present hospital beds," Father Callahan said. He pointed out that following more than a year of study and work of the council, medical staff utilization committees have been set up in every voluntary hospital in the state.

Father Callahan explained that utilization committees are composed of physicians in each local hospital to consider any possible inappropriate use of hospital facilities. These committees are reviewing hospital admissions as to the necessity and length of stay or any factors which might contribute to unnecessary additional cost for the patient.

The council also reported that the Rhode Island Blue Cross has been requested to direct any questionable claims to the local hospital staff committees for consideration.

"Without more study and facts, it is impossible to determine the impact of new hospital facilities on health care costs in our state," Reverend Callahan stated. "However, since we are now prepared to handle questions of medical utilization, we intend to give the question of state-wide hospital planning our concern with possible recommendations for action in this area."

The Rhode Island group was formed as a result of action of the Rhode Island Medical Society in 1959, and is similar to groups in other states organized by the hospitals, the medical profession, and local community leaders, in order to determine the best methods of providing health care at the lowest possible cost to the public.

Since its inception, the council has also initiated a program through the Hospital Association of Rhode Island encouraging hospital procedures for more efficient use of facilities.

The council has also requested Rhode Island Blue Cross to establish new studies of hospital cases by age, sex, type of disease and other factors to determine their relation to health care costs.

Members of the Medical Economics Council are: Father Callahan, J. Dewey Lutes, Oliver G. Pratt, Doctor I. Herbert Scheffer, William E. Sleight, and William K. Turner, representing the hospitals of the state. The medical profession is represented by Doctor Samuel Adelson, Doctor Charles J. Ashworth, John E. Farrell, Doctor Earl F. Kelly, Doctor Stanley D. Simon, and Doctor George W. Waterman.

Blue Cross representatives are Harry H. Burton, Daniel H. Ford, and Stanley H. Saunders. Professor Chelcie C. Boslan, Edgar H. Clapp, and John J. Hall are representing Physicians Service on the council.

* * *

Periodic Checkups for Teachers Stressed

The need for teachers and other school personnel to undergo periodic medical checkups was stressed at a joint session of the American Medical Association and the American School Health Association at a meeting June 25 in New York City.

Physicians and educators said such medical examinations for teachers, janitors, bus drivers and others employed at schools would not only help prevent the spread of disease to children but aid in maintaining the supply in the manpower-short teaching profession.

"Possibly in no group is health, physical, mental and social, more important than in our teachers," declared Doctor Lemuel C. McGee, president of the Delaware Medical Association. "It is not sufficient that schoolchildren be protected only from the obvious hazards of infectious disease carried by a teacher," he added. "The pupils are clearly entitled to a teacher with physical well-being and emotional stability."

Gerhardt Rast, PH.D., head of the Lincoln School, New York City, told the group that school administrators must concern themselves with the emotional as well as physical health of teachers.

* * *

Influenza Down in 1961

A nationwide survey of private medical practice indicates that 1961 may turn out to be an unusually mild influenza year. The survey, based on data released by the National Disease and Therapeutic Index, which measures the number of patient-doctor contacts involving various diagnoses, estimated only 1.7 million patient visits for influenza during the first quarter of the current year. This represents just 20% of the 8.5 million visits projected for the first three months of 1960, an epidemic year.

Historically, the first quarter of the year has accounted for a large proportion of total influenza patient visits for the year.

* * *

Government Hospitals Increased by 55% Since 1946

The number of hospitals sponsored by state and local governments has increased 55% since 1946, according to PATTERNS OF DISEASE, a monthly Parke, Davis & Company publication for physi-

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cians. In a special report on hospitals in the U.S., PATTERNS points out that "there also has been a marked increase in the number of voluntary, or nonprofit hospitals, while the number of privately owned, or proprietary, hospitals dropped more than 17% in the same period." As of January 1, 1961, there were 1,378,035 hospital beds in the U.S., exclusive of those in federal facilities, or 7.5 beds per 1,000 population. The Public Health Service has estimated a national goal of 9.5 beds per 1,000 population by 1970.

The District of Columbia has the highest number of hospital beds per 1,000 population — 17.8, followed by 14.0 in New York and 13.2 in Massachusetts. "Despite the over-all increase in the number of hospital beds since 1950, the number of acceptable beds comprises only 58.2% of the number needed," according to PATTERNS. The greatest shortage appears to be in chronic disease hospitals, where as of January 1, 1961 acceptable beds totaled only 16.7% of the number needed. There are 456,940 acceptable beds in mental hospitals, compared with a desired number of 884,721, and 619,666 in general hospitals compared with a desired number of 778,081. "Existing facilities, however, are not always fully utilized. On a typical day in 1960, 1 of 4 beds in nonfederal general hospitals was empty."

* * *

Court Decision on Use of Labor Union Dues Far Reaching

Harry J. Lambeth, reporting in the U.S. Chamber of Commerce WASHINGTON LABOR WHIRL, notes that when the U.S. Supreme Court closed its doors for the summer it handed down one of the most important labor law decisions in years. Although it reaffirmed its 1956 ruling that union shop contracts do not violate the constitution, it decided unions may not use dues money for political purposes when collected under compulsory union shop agreements.

The decision appears to open the door for legal actions against unions that use dues money for purposes other than collective bargaining and grievance procedures.

While the burden of objecting is placed on individual union members, it could lead to suits to prevent dues money for such union activities as financial aid to integration-bent "freedom riders," union sponsored radio news programs, gifts to churches, hospitals, and other charities, and money to purchase control of businesses.

* * *

The Physician and the Cancer Patient

The American Cancer Society is concerned with the *total* cancer problem. A crucial part of this problem relates to the cancer patient and his family. To help the medical profession explore ways and means of meeting the patient's special needs, the scientific session of the Society's next Annual Meeting at the Hotel Biltmore in New York City, October 23-24, 1961, will be devoted to "The Physician and the Total Care of the Cancer Patient." Various specialists will examine the psychological and physical problems facing the cancer patient and his family. Consideration will be given to such topics as decisions in the early care of the cancer patient, counseling the cancer patient, what the patient should be told, care of the advanced cancer patient, society's role in service to the cancer patient.

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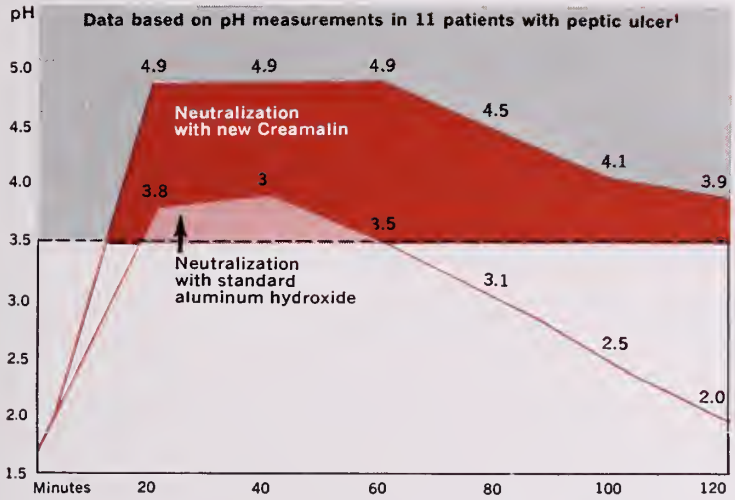
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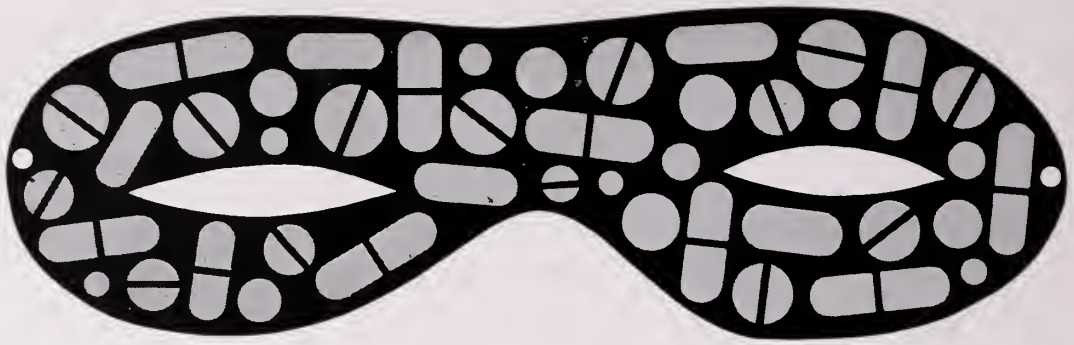
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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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Rhode Island Medical Journal,
January, 1961

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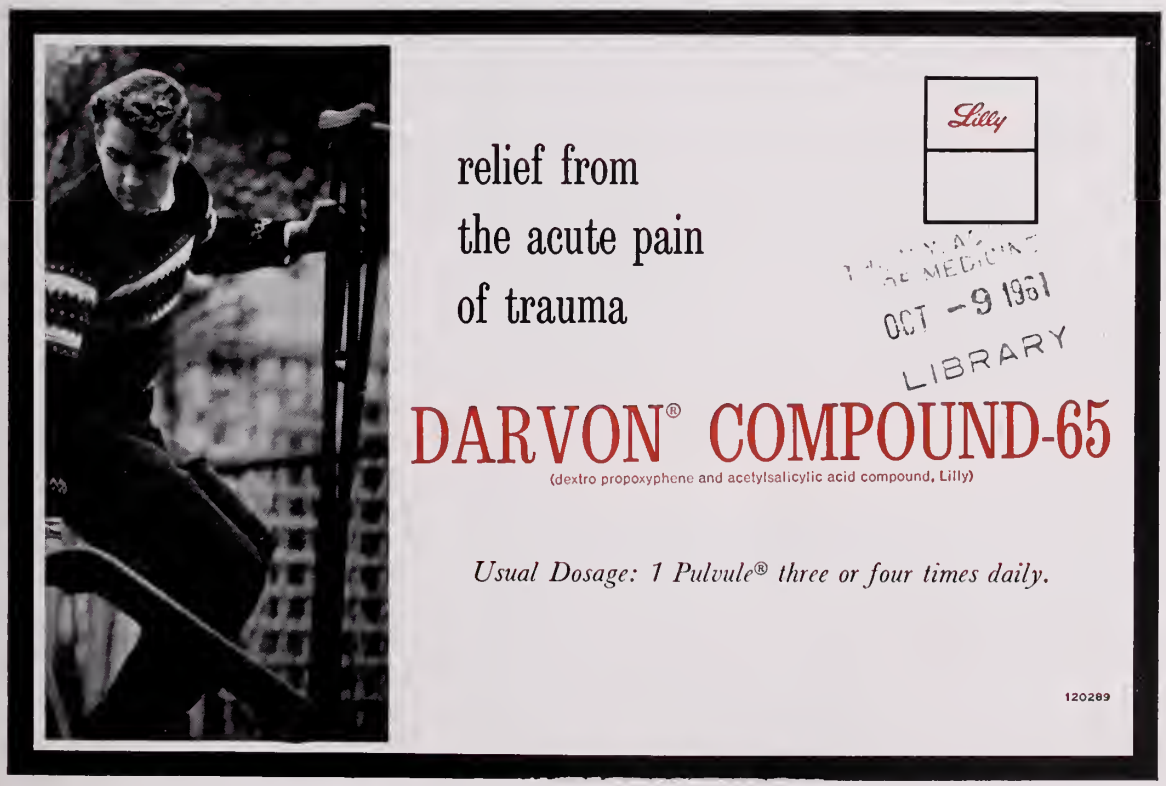
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(1) Carter, S.: *M. Clin. North America* 37:315, 1953.
(2) Maltby, G. L.: *J. Maine M. A.* 48:257, 1957.
(3) Buchthal, F.; Svensmark, O., & Schiller, P. J.: *Arch. Neurol.* 2:624, 1960.

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Thiamine, mg.	0.5	50
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Calcium, Gm.	0.5	67
Phosphorus, Gm.	0.4	53
Iron, mg.	4	40
Iodine, mcg.	60	60

Vitamin E (Int. Units)	2.5
Pyridoxine, mg.	0.4
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references: (1) Nelson, W. E.: Textbook of Pediatrics, ed. 7, Philadelphia, W. B. Saunders Company, pp. 231-233, 1959. (2) Parrott, R. H., and Nelson, W. E.: *ibid.*, p. 759. (3) Johnston, J. A.: Ann. New York Acad. Sc. *69*:881-901 (Jan. 10) 1958. (4) Burke, B. S., and Kirkwood, S. B., in Greenhill, J. P.: Obstetrics, ed. 12, Philadelphia, W. B. Saunders Company, 1960, pp. 126-131. (5) Skillman, T. G.; Hamwi, G. J., and May, C.: Geriatrics *15*:464-472 (June) 1960.

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THE WASHINGTON SCENE

A Summary Report Prepared by the Washington Office of the American Medical Association

THE AMERICAN MEDICAL ASSOCIATION cited more than fifty reasons why the vast majority of the nation's physicians believe the Administration's medical care program would be "bad medicine for the people of this country."

The A.M.A.'s objections to the proposal were spelled out in a detailed, 91-page printed statement presented to the House Ways and Means Committee by Doctor Leonard W. Larson, Bismarck, N.D., president of the A.M.A.

The committee held two weeks of hearings (July 24-Aug. 5) on the Administration proposal (H.R. 4222) which would provide limited hospitalization, nursing home care and outpatient diagnostic services for social security recipients. The program would be financed by an increase in payroll taxes on workers, employers and the self-employed.

Doctor Larson declared that the Administration program would force upon Americans a system of health care in which the quality of medical care would deteriorate, in which quality would become secondary to cost.

He said American medicine is the best in the world, medical education unsurpassed and the qualifications of U.S. physicians unmatched.

"Ours is a dynamic system of health care — and it works," he said. "The very fact that we now have 16½ million Americans sixty-five years of age and older proves that it works.

"Yet, this same system of medical care is now under attack. At a moment when American medicine is pre-eminent throughout the world, it is proposed that we adopt the very systems under which one European nation after another has lost its former leadership in medical science.

"The staggering costs of such plans, the administrative problems they create — let these considerations be secondary," he said. "The important thing is to see, at close range, the disruption of the doctor-patient relationship; the delays in admission to hospitals; the time wasted in the overcrowded offices of doctors; the regimentation of medical practice; the effect of the program on medical research; the availability of medical facilities and personnel — in other words, medicine in action on a government-run, assembly-line basis."

Doctor Larson said also:

1. Congress is being asked to plunge into a compulsory government-operated program of health care for certain of the country's elderly without knowing what even the first-year cost will be — whether $1 billion or $4 billion — and without any clear idea of the extent of the problem it seeks to solve.

2. The bill under consideration would give a single government official the power to "become the nation's czar of hospital care."

3. Contrary to statements of supporters of the measure that physicians' services are not included in the program, more than 50,000 doctors would be directly affected by regulations and controls exercised by government over operations and administration of hospitals.

4. Enactment of the program would "lower the quality of medical care available to the older people of the United States" because "it would introduce into our system of freely practiced medicine elements of compulsion, regulation and control" by government.

5. The Administration proposal is unnecessary in light of the true economic status of the aged and because of the spectacular rise of voluntary, private health insurance coupled with passage by Congress of the Kerr-Mills Medical Aid for the Aged Law last year and the existence of other public and private programs of aid to the needy.

6. Health care at the expense of the working people would be provided for millions who are financially able to pay for their own care.

7. The legislation "proposes that we distrust the brains and capacities of today's Americans" because "it suggests that the aged — as an entire group — are not capable of looking after their own affairs and providing for their own needs."

8. Increasing costs of the program could impose such a financial strain on social security that the entire system could be jeopardized.

9. The Administration's bill is just as objectionable as the five similar health care proposals rejected by Congress since 1942.

10. The bill would violate "American ideals of independence, self-sufficiency and personal responsibility" by establishing a system in which medical aid would be provided not on the basis of need but

concluded on page 500

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Masters in Medicine . . .

JOHN W. KEEFE and PYLORIC STENOSIS

SEEBERT J. GOLDOWSKY, M.D., *Editor-in-Chief*
RHODE ISLAND MEDICAL JOURNAL

FOR THE FIRST TIME in the *Masters in Medicine* series the spotlight is directed upon a great surgeon and physician of Rhode Island, Doctor John W. Keefe (1863-1935) of Providence. His local reputation was justly founded upon a robust surgical skill and upon courageous pioneering in many fields of modern surgery. Less well known locally, however, are his original contributions to the successful surgical management of congenital hypertrophic pyloric stenosis, the most important basis for his national reputation and historical stature. He appears in fact to have a legitimate claim to priority for the operation of pyloromyotomy.

Speaking before the American Association of Obstetricians and Gynecologists in September, 1912, he stated: "Gastroenterostomy, both the anterior and posterior methods, have been employed for the cure of pyloric stenosis. . . . Gastrojejunostomy upon a weak, starving infant as a subject is a decidedly serious operation. It does not directly remedy the stenosis. Bile and pancreatic juice may enter the stomach through the stoma and thus interfere with the digestive process." The following year before the same society, meeting in Providence, he made the following further observations: "Gastroenterostomy is attended with a high rate of mortality, about 50 per cent save in the hands of expert surgeons. Deaths have occurred from intestinal obstruction several weeks following the immediate effects of the operation. Jejunal ulcers may form at the side of the stoma giving rise to serious trouble."

His clinical description of the disorder was classical: "The food is expelled suddenly and with considerable force from 1 to 6 or 7 feet. This propulsile or projectile vomiting is characteristic of obstruction. . . . Changing the diet does not arrest, for any length of time, the loss in weight which soon becomes alarming. . . . The peristaltic wave is seen passing transversely from left to right and terminating in the right hypochrondrium. Deep palpation . . . reveals a hard olive-shaped mass . . . in the majority of cases. . . . The x-rays may give us valuable aid by showing us that a solution of bismuth does not pass beyond the stomach. It is, therefore, desirable that we employ x-ray to assist us in determining the presence of obstruction of the pylorus."

Fredet in 1901 first described the operation of pyloromyotomy. After splitting the muscle longitudinally without opening the mucosa, he resutured the muscular layers longitudinally. Ramstedt in 1912 independently discovered the procedure of pyloromyotomy but allowed the unopened mucosa to balloon through the defect without attempting to close it. Keefe acknowledged the work of Fredet, referring inaccurately to Fridet and Guillmot (Fredet and Guillemot), whose report appeared in 1911, three years after Fredet's original contribution. He was, however, obviously completely unaware of the more important contribution of Ramstedt, appearing about the same time as his own presentation to the American Association of Obstetricians and Gynecologists. Although priority of publication cannot be claimed for him as regards either Fredet or Ramstedt, the unchallenged fact stands that Keefe performed his first successful operation in 1905 two years before the first published case of Fredet, and seven years before Ramstedt. He performed his second operation in 1911.

His procedure is closely related to that of Fredet. Through a small gastrotomy incision a sound was passed through the pylorus. "The sound was left in position and with a knife the peritoneum and circular muscular fibers forming the pyloric tumor were incised parallel with the long axis of the pylorus, *down to but not including the mucosa* (italics ours). The hypertrophied muscle was now separated from the mucosa laterally over half the circumference of the pylorus and a small portion of the muscle on either side removed, which allowed accurate transverse approximation of the wound." Larger sounds were passed if necessary and the gastrotomy was then closed.

Case Report

(Reprinted from the original)

B. J. T., a male infant was born May 31, 1905. He appeared to be a strong, perfectly well-developed child, weighing 8¼ pounds. By June 11 he weighed 8½ pounds but from that time he commenced to lose weight rapidly.

He vomited the mother's milk from the first, usually the milk from one breast more than the other, but the fact that one breast furnished more

milk than its fellow and in consequence of the infant receiving a larger feeding from the breast when the milk came freely, may account for this condition.

June 19, he was given modified milk and later barley water, kounis, etc. June 21 Dr. John W. Mitchell, the attending physician, called Dr. Edward T. Walker in consultation and the next day the patient was also seen by Dr. Charles Putnam of Boston, who said that the patient was either suffering from improper food or a stenosis of the pylorus. A wet nurse was then employed but the vomiting continued.

The vomiting occurred shortly after the ingestion of food and was projectile in character, the food being shot out of the mouth. The vomitus consisted of milk and mucus, no bile found.

I was called to see the infant by Dr. Mitchell, June 24, 1905; he was then three and one-half weeks old and weighed 6 pounds and 12 ounces. He has vomited all of the various foods given him from birth. Sometimes he vomited immediately after taking food and at other times the food might remain in the stomach for one-half hour. He was fretful most of the time but after emptying the stomach he seemed relieved and would go to sleep. Upon waking he was greedy for food. Contrary to the rule, his bowels moved freely and lately the stools were greenish in color with very offensive odor. He was very much emaciated, his ribs being very prominent due to the lack of nutrition. There was visible peristalsis of the stomach; the peristaltic waves passed from the cardiac end of the stomach toward the pylorus. No tumor could be felt by palpation.

Operation: A median incision 2 inches long, beginning just below the ensiform cartilage, was made, which revealed a nonadherent, hard, pyloric tumor, about the consistency of gristle, measuring 3 cm. in length by 1 cm. in diameter. The stomach wall was hypertrophied and the intestine collapsed.

An incision was made 1 inch from the pyloric end of the stomach and through this opening a steel sound, No. 14 French scale, was passed into the pyloric opening. The peritoneum over the pyloric tumor was split and a longitudinal incision was then made, with a knife, through the muscle down to the mucosa. Other sounds were then passed through the stomach wound and the pylorus into the duodenum. The largest size used was No. 25, French scale. The ends of the wound of the pylorus were brought together with Pagenstecher thread and the peritoneum and muscles were so united that the line of suture was transverse, which increased the diameter of the pylorus. The opening in the stomach was closed with two rows of interrupted Lembert sutures and the abdominal wall closed in layers.

Saline enemas were given and rectal feeding commenced shortly after operation. Within an hour he suffered severely from shock and was given minute doses of strychnia. He was given the wet nurse's milk with the aid of a medicine dropper.

June 29 the stitch in the skin was removed and on July 3 a small intramural abscess was opened, which healed in a short time.

July 15 he weighed 7 pounds and 5 ounces, although he continued to vomit considerably. He was again seen by Dr. Putnam with Dr. Mitchell and the former advised gastrojejunostomy unless he improved.

July 20 another wet nurse, a negress, nineteen years old, was employed. Her milk agreed perfectly with our patient and the vomiting ceased. Six days later the weight was 8 pounds and 3 ounces. Some weeks later in August, 1 pound a week was gained.

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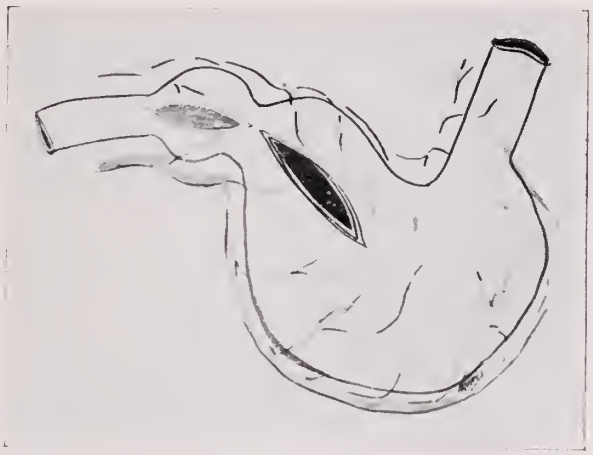


FIGURE I

"Showing opening into stomach through all three coats and pyloric opening down to mucosa." (Reproduced from the original report.)

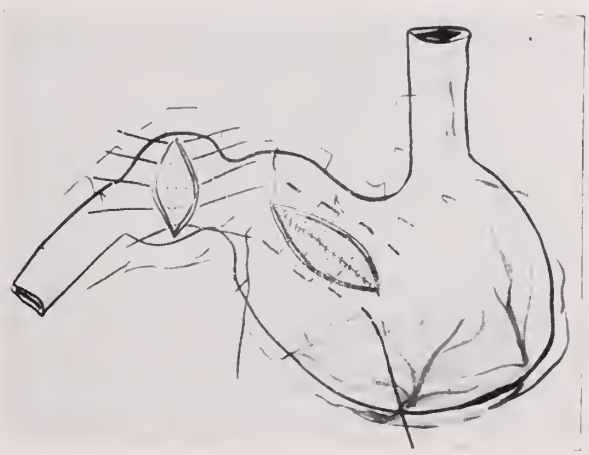


FIGURE II

"Removal of part of external and middle coats over pylorus allowing incision to be closed vertically, thus smoothing out longitudinal folds in mucosa." (Reproduced from the original report.)

Weight October 30 was 17 pounds and 5 ounces. Weight December 30 was 19 pounds and 14½ ounces. During the latter part of December two teeth appeared.

January 28, 1906, the weight was 19 pounds and 1 ounce. Two weeks ago it was thought advisable to wean the child as the wet nurse's babe was about eleven months old (one year old March 6, 1906) and the quantity of milk diminishing. Modified milk was given, consisting of cow's milk, sugar of milk and lime water. This was immediately rejected while the wet nurse's milk was retained even when from 3 to 9 ounces were taken at a feeding, showing that it was the quality of the food and not the narrowing of the pylorus that caused the vomiting and the diminution in weight. The fact that the infant is teething may have some bearing on the case.

September 12, 1912. The infant continued to do well and is now a strong and rugged boy over seven years of age.

References

[1]Dufour, H., and Fredet, P.: Sténose hypertrophique du pylore, chez un nourrisson de deux mois, traitée avec succès par la pyloroplastie. Bull. et mém. Soc. méd. d. hôp. de Paris 24:1221, 1907

[2]Fredet, P., and Guillemot, L.: La sténose du pylore par hypertrophie musculaire chez les nourrissons. Ann. de gynéc. et obst. (Paris) 7:604, 1910

[3]Ramstedt, C.: Zur Operation der angeborenen Pylorusstenose. Med. Klin. (Berlin) 7:1702, 1912

[4]Keefe, J. W.: Stenosis of the Pylorus in Infancy. Am. J. Obstet. and Dis. of Women and Children 67:383, 1913

[5]Keefe, J. W.: Stenosis of the Pylorus in Infancy with Report of Cases. Am. J. Obstet. and Dis. of Women and Children 69:957, 1913

[6]Pollock, W. F., and Norris, W. J.: Dr. Conrad Ramstedt and Pyloromyotomy. Surgery 42:966, 1957

[7]Ravitch, M. M.: The Story of Pyloric Stenosis. Surgery 48:1117, 1960

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THE WASHINGTON SCENE

concluded from page 496

on the basis of age.

Doctor Larson described estimates of the cost of the Administration program as "confusing."

The A.M.A. president reminded committee members that H.E.W. Secretary Abraham Ribicoff had told them that "a closer study" had revealed it would be necessary to increase the taxable wage base from the present $4,800 to $5,200, rather than the $5,000 fixed in the bill when it was introduced.

He also pointed out that H.E.W. originally had said nursing home services during the first year of operation of the Administration scheme would cost $9 million.

But in May, Doctor Larson said, H.E.W. officials reported the figure as "unrealistically low" and lifted it to "somewhere between $25 million and $255 million."

"Obviously this estimate is something less than precise," Doctor Larson said.

The A.M.A. president said that supporters of the Administration proposal have built their case on five false premises: (1) that the sociological problems of older people can be solved through legislation; (2) that most, if not all, of the aged are in poor health; (3) that most, if not all, of the aged are verging on bankruptcy; (4) that the problem of the aged in financing their health costs will get worse before it gets better, and (5) that voluntary health insurance and prepayment plans, private effort and existing law will not do the job that needs doing.

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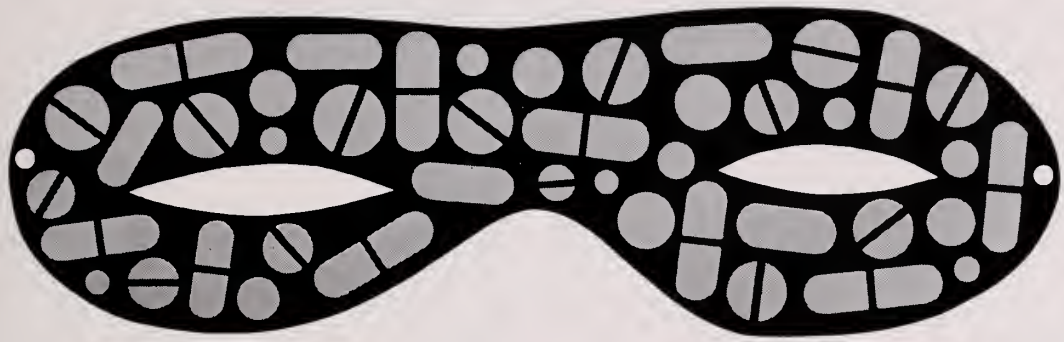
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Rhode Island Medical Journal,
January, 1961

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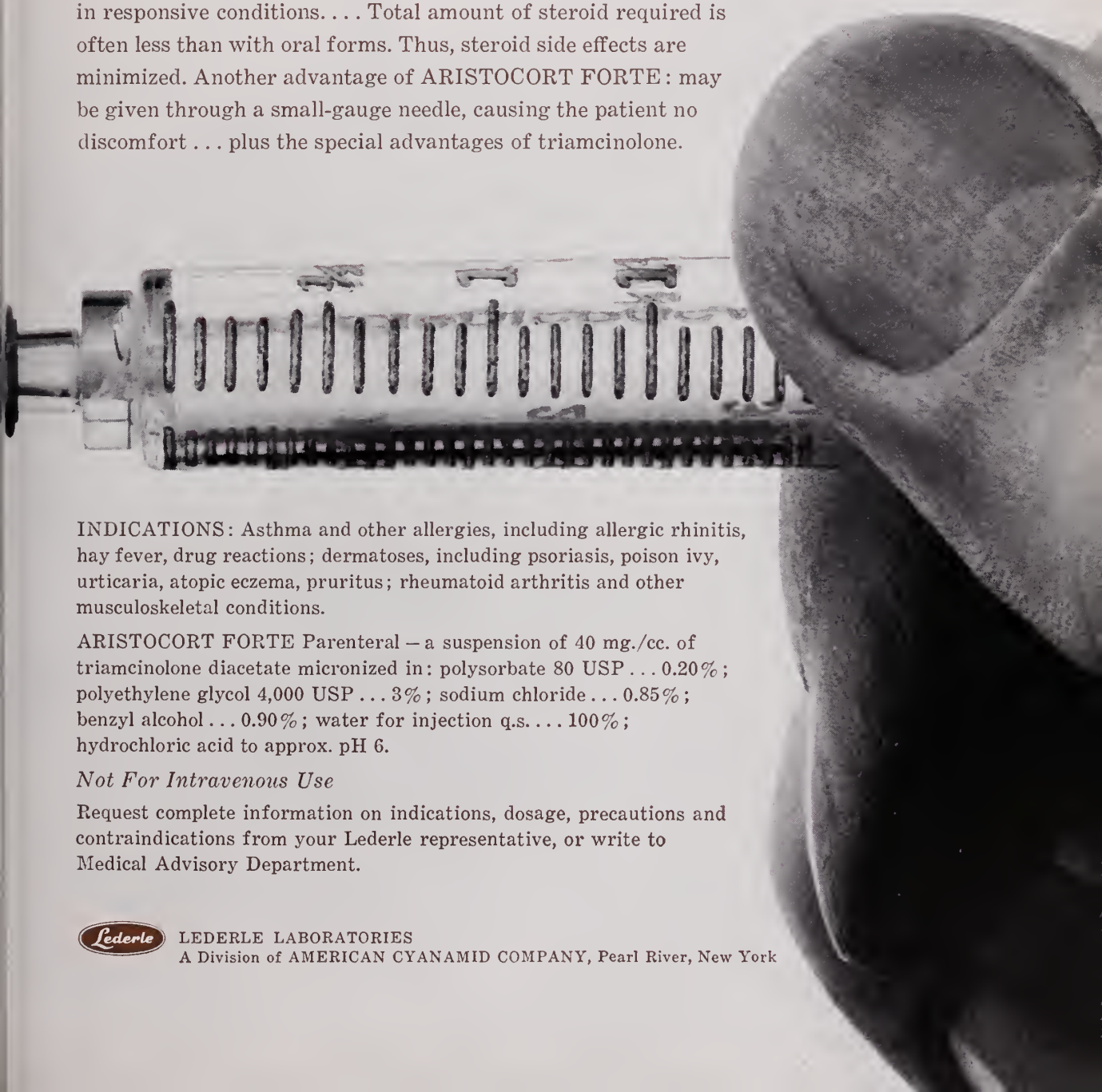
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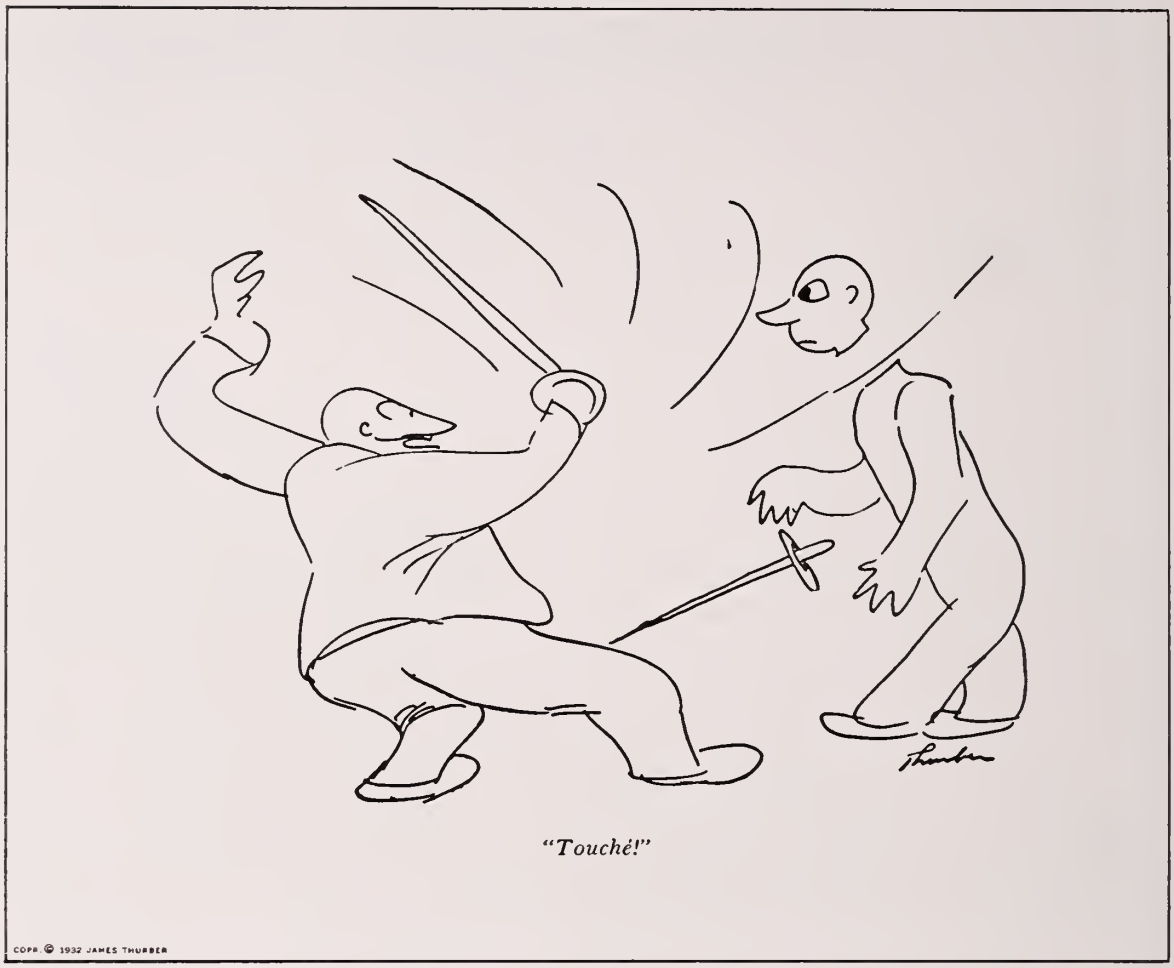
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CONDITIONS OF THE CARDIOVASCULAR SYSTEM AMENABLE TO SURGERY*

FRANK GLENN, M.D.

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THE SURGICAL CORRECTION of conditions of the cardiovascular system is one of the most outstanding accomplishments of this era. The many developments in this area over the past thirty years are nothing less than spectacular. These include the Gibbon pump oxygenator, the use of homografts and prostheses to replace diseased blood vessels, the employment of hypothermia to prolong survival of tissues and organs deprived of their ordinary blood supply, controlled cardioplegia and resuscitations, ways and means to prevent and combat metabolic acidosis, the recognition of additional factors in blood clotting, and a vast array of new methods that provide for accuracy in diagnosis and evaluation. The surgical principles underlying these developments had been established long before the beginning of this period, and occasional operations had demonstrated the feasibility of direct surgical attack upon the heart and large vessels. However, near the end of World War II in 1945, a combination of circumstances seems to have set the stage for what has finally taken place. The hazards of intrathoracic procedures had been overcome, anesthesia was more often administered by doctors, and the chemotherapeutic agents and antibiotics effectual in the control of infection had been discovered. In addition increasing hospital facilities throughout the country and more surgical training programs provided more versatile young surgeons. Most important of all, a greater proportion of the profession was devoting its time to research on problems that were barriers in this frontier area.

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From the Department of Surgery, the New York Hospital — Cornell Medical Center, New York City.

Numerous contributions made prior to 1945 have a direct relationship to modern cardiovascular surgery. To record them here would be to repeat much of the history of medicine. Outstanding and relatively recent examples were Landsteiner's recognition of blood groups and the cross-matching of blood,[1] and Carrel's animal demonstrations in blood vessel suture and transplantation of limbs.[2] And even these are dwarfed by the work of such ancients as Paré, Harvey, and Hunter.

A few surgeons still actively at work have made such significant contributions, that their names will probably go down in the history of surgical therapy for conditions of the cardiovascular system as have the names of the fathers of procedures directed to other systems and areas of the body. These include Sir Henry Souttar, Robert Gross, Alfred Blalock, Clarence Crafoord, John Gibbon, Michael DeBakey, and many others.

Sir Henry Souttar in 1925 reported his attempt to enlarge a stenosed mitral valve with his index finger inserted into the left auricle through the auricular appendage.[3] The patient, a girl of 19, was improved and lived for several years. Employing Souttar's method, Bailey and Harken in 1948 inaugurated the surgical attack upon mitral stenosis in this country.

Robert Gross[4] in 1939 was the first successfully to obliterate the patent ductus arteriosus by ligature. He went on to demonstrate that this could be done safely by division and suture. Thus he corrected a vascular anomaly and thereby prevented those complications commonly associated with it. In 1945 both Crafoord[5] of Sweden and Gross[6] independently described resection of a coarcted segment of the aorta and restoration of its continuity by suture anastomosis. These two accomplishments represent the application of principles demonstrated by Carrel in the suturing of blood vessels in animals. Further elaboration of these methods has led to the surgical treatment of aneurysms and obliterative disease of the aorta and its branches so brilliantly pursued by Michael DeBakey and his associates.

continued on next page

Alfred Blalock[7] in 1944 relieved the cyanosis of a patient with the tetralogy of Fallot by anastomosing a systemic artery, the right subclavian to the right pulmonary artery. The improvement was immediate and dramatic, and many patients were operated upon thereafter. This short circuit operation stimulated wide interest in the surgical correction of other intracardiac malformations that had been extensively studied by Blalock's coworker, Maude Taussig. The marked upsurge in research that followed this accomplishment paved the way to many of the intracardiac corrective operations currently employed.

John Gibbon[8] of Philadelphia began to experiment on the use of an extracorporeal mechanism to oxygenate and propel blood through the systemic circulation in the early 1930's. In 1953, he closed an atrial septal defect under direct vision in a young girl—the first such procedure to be done using the pump oxygenator. This, I think, marked the greatest single advance on the road to present day cardiovascular surgery. Soon thereafter, with the circulation carried on by the extracorporeal mechanism, cardioplegia was employed to stop the heart at will, and procedures were developed so that it could readily be restarted, thus rendering the organ immobile during delicate surgery. Within the past eight years many innovations of the Gibbon machine have been introduced. The difficulties associated with the learning of completely new approaches made possible by the pump oxygenator have taxed the skills of the many surgeons who have embarked on this endeavor. The success attained has, however, stimulated not only the surgeons but other members of the profession as well to learn more about poorly understood lesions of the cardiovascular system previously given little attention because nothing could be done to remedy them.

The cardiovascular system is subject to congenital anomalies, lesions of disease, and injury; many of these may be corrected, improved, or cured by surgical therapy. This discussion will consider three groups (1) Acquired Heart Disease; (2) Conditions of the Aorta and its Branches; (3) Congenital Cardiac Anomalies.

Acquired Heart Disease

Pericardium. Pericarditis becomes a surgical problem when the mechanical interference with cardiac function that it causes is refractory to medical measures. Usually this interference results from accumulation of fluid within the pericardial sac or changes in the pericardium that prevent the heart from filling and emptying in a normal manner.

Chronic idiopathic pericarditis with effusion may cause tamponade sufficient critically to reduce cardiac output. Aspiration affords only temporary relief. Partial pericardiectomy corrects the condition by draining the excessive fluids into the pleural space, where they are absorbed.

Constrictive pericarditis is believed to be due to long-standing infections such as tuberculosis. The pericardium becomes greatly thickened and undergoes various degrees of calcification. It may or may not be densely adherent to the myocardium, but in either event to all intent and purposes it forms a rigid envelope about the heart that prevents filling in diastole and hence reduces the cardiac output. The constricting pericardium may be removed with marked benefit and sometimes complete restoration of health if the condition has not prevailed too long and if it has not caused damage to the myocardium.

Valvular Disease

Mitral Valve. All four heart valves may be affected by infection or other disease, involvement of the mitral valve being by far the most frequent cause of disability. As a result of rheumatic fever it may be partially destroyed and thus rendered insufficient, or scarred and distorted so as to be stenotic. The diagnosis is readily made. If a patient with mitral valve disease experiences progressive symptoms and disability to the extent that ordinary activity is limited, operation should be embarked upon unless there are contraindications. In this phase of rheumatic heart disease, roentgenogram examination usually reveals marked enlargement of the left auricle, and to a lesser degree increase in size of the right ventricle, along with changes in the lung fields associated with congestion and pulmonary hypertension and sclerosis. Many patients with rheumatic heart disease are in auricular fibrillation, and a fair proportion have had systemic emboli that originated from a thrombus in the left auricle.

Angiocardiography and cardiac catheterization are sometimes needed to clarify the diagnosis and to demonstrate the presence or absence of certain changes within the heart that may have a bearing on the surgical approach. An associated bacterial endocarditis and advanced disease in other valves, in the myocardium, or in both constitute contraindications to immediate operation. A history of previous emboli, thrombi within the left auricle, calcium deposition in the mitral valve, and advanced age are recognized as contributing to the risk of the operation. In over 90 per cent of instances, enlargement of the mitral orifice from a critical area of less than 1.0 sq. cm. to 3 or 4 sq. cm. (4-6 sq. cm. is normal) can be accomplished by the indirect approach through the left auricular appendage. During the past 14 years several thousand patients throughout the United States have been treated surgically with a mortality rate of about 5

per cent and improvement in 75 per cent. In a group of approximately 600 patients at The New York Hospital–Cornell Medical Center,[9] the results have been quite similar. Recurrences of mitral stenosis do occur, owing to resealing of the commissures or to progress of the disease involving the valve ring to cause further scarring and contracture. And while this has been reported in only 2-4 per cent of patients during the first 5 years after operation, it may increase with the passage of additional years.

There is a group of patients in whom the mitral valve cannot be dealt with satisfactorily by the indirect approach. If surgery is to be undertaken in such individuals it should be accomplished by the open heart approach method using the pump oxygenator. As proficiency is gained and the risk further reduced, this method will be more frequently employed. It provides a better opportunity for the surgeon concomitantly to open the stenosed valve, repair the incompetency, remove superficial calcium depositions, evacuate thrombi from the left auricle, and in rare instances replace the entire valve. The surgical treatment of mitral stenosis is firmly established and is constantly being improved.

Aortic Valve. The aortic valve may be involved by rheumatic fever, either alone or along with the mitral valve. It may be the site of changes due to atherosclerosis and bacterial infection. These pathologic processes result in stenosis or insufficiency, depending upon their extent and exact location. Either condition may cause great disability and may be fatal. Because the coronary arteries have their origin from within two of the three aortic cusps, impairment of myocardial circulation is frequently a part of the clinical picture. The circulation to the myocardium is most impaired during systole in aortic stenosis and during diastole in aortic insufficiency. The common manifestations of aortic stenosis are early fatigue, episodes of fainting and anginal pain often assocated with arrhythmias, dyspnea on exertion, and congestive heart failure. There is usually cardiac enlargement, but not always, particularly, if the condition has developed recently. Post-valvular dilatation of the aorta and calcium deposition in the valve are readily demonstrated by X-ray examination. Refinements in methods of evaluation include cardiac catheterization and selective aortography. An aortic orifice of less than 0.5 sq. cm. in the adult is critical and is not long tolerated.

The approaches to correct aortic stenosis have been numerous and ingenious, and most have had some degree of success. A collapsible valvulotome introduced through the left ventricle has been abandoned because its use was associated with coronary occlusion due to fragmentation and dislocation of calcium containing atherosclerotic depositions near the coronary ostea. Furthermore in the blind breaking up of a stenosis, a valve leaflet may be torn, sometimes producing an insufficiency. The direct approach using hypothermia is currently being more widely used (Fig. 1 and 1-A). Without causing additional risk to the patient, this improved method affords time for the surgeon to accomplish what is frequently a tedious and exacting task. Using the pump oxygenator for total body perfusion supplemented by hypothermia and sometimes perfusion of the coronary arteries or induced cardioplegia, even the most markedly distorted valve with both stenosis and insufficiency can be greatly improved. Valve leaflet prostheses are being used with increasing success. Homografts of leaflets and even the aortic ring replacement are feasible.[10,11] For gross aortic insufficiency, the Hufnagel valve placed distally in the aorta has provided temporary improvement.

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FIG. 1. AORTIC STENOSIS

Aortic stenosis due to fusion of cusps corrected by direct approach employing the extracorporeal mechanism and cardioplegia.

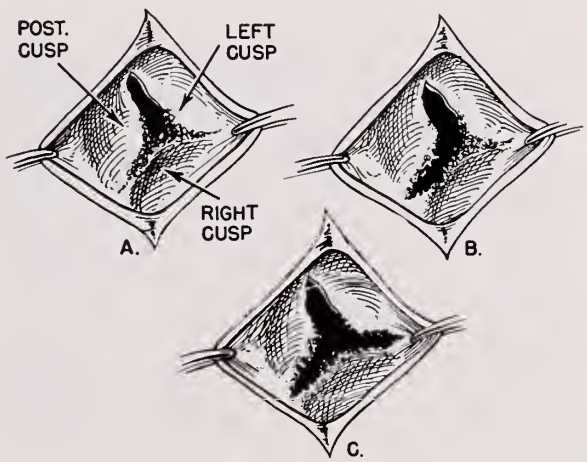


FIG. 1-A

Line drawing insert indicating approach to overcome aortic stenosis.

Surgical treatment of aortic stenosis is on the ascendancy. Our experience[12] parallels that of others, namely, that patients with disabling manifestations of short duration and under 60 years of age are as a group dramatically improved, with a mortality rate of under 10 per cent. Long-term follow-up studies not yet available are needed to determine its value in prolongation of life.

Tricuspid Valve. Acquired deformity of the tricuspid valve is not frequent. When it occurs it is usually due to rheumatic infection and is accompanied by mitral valve disease which far overshadows it. Tricuspid insufficiency is commonly associated with right ventricular enlargement, secondary to mitral stenosis. When correction of the mitral stenosis is followed by decrease in the size of the right ventricle, the tricuspid insufficiency is often markedly reduced or completely corrected. Tricuspid stenosis may occur in multivalvular rheumatic involvement. The surgical approaches are indirect, through the right atrial appendage, and direct, through the wall of the right auricle. The structure of the stenosed tricuspid valve is comparatively fragile, and correction of a stenosis may result in valvular insufficiency which, if not marked, is of little consequence.

Pulmonic Valve. Acquired disease of the pulmonic valve is rare and is estimated as accounting for less than one-half per cent of valvular deformities. Isolated pulmonic valve involvement due to rheumatic fever has not been encountered by our group.

Tumors of the Heart

Although generally considered to be uncommon, being seen in about one in every 2-3000 autopsies, primary neoplasms of the heart are now beginning to be reported more frequently. At The New York Hospital–Cornell Medical Center we have observed several such tumors. These neoplasms may be either benign or malignant. The benign include myxoma, lipoma, fibroma, and rhabdomyxoma. The malignant tumors are carcinomas and sarcomas. The clinical manifestations of cardiac tumors depend on whether the neoplasm is located within a cardiac chamber, the myocardium, or the pericardial cavity. Advances in roentgenographic methods of visualizing the chambers of the heart and large vessels by selective angiocardiography have rendered location of these tumors increasingly satisfactory. Benign tumors have been successfully removed from all chambers of the heart, using the direct open heart approach. Thus far surgery has provided only temporary palliation for malignant tumors by partial removal. Metastatic tumors of the heart are being currently studied with increasing interest. Hanfling[13] reviewed 127 cases from among 694 deaths from cancer found at post mortem at The New York Hospital–Cornell Medical Center over the seven-year-period 1947-1953. Clinical manifestations include heart block and pericardial effusions. X-ray therapy has been beneficial in some instances. Single metastatic tumors should be attacked surgically.

Myocardial Ischemia

Myocardial ischemia due to occlusive disease of the coronary arteries is one of the most frequent causes of death in our population. As the proportion of our people over 65 increases, so does the relative incidence of this condition. Because individuals of 90 and over are encountered with minimal changes in their vascular system in general and specifically in their coronaries, the obvious question arises: Why the difference? Several factors may play a role in the aging process, and some of these become manifest even among those who are chronologically young. These include the genetics of inherited physiological traits, environment, diet, occupation, episodes of infection and disease, the use of drugs and noxious substances such as tobacco and alcohol, and finally mental stress.

Prevention and control of coronary artery disease are, to say the least, unsatisfactory. The success or failure of medical management and treatment appear to depend more upon the pathological changes present than upon the measures and medications employed. The same holds true thus far for surgical attempts to correct a diminishing myocardial circulation. Surgical therapy is comparatively new in this field, and it is hoped that further developments will render it more effective.

To this end, surgeons have initiated many experiments in the laboratories and have extended them to the operating room in an attempt to increase blood flow to the myocardium.

The following general approaches have been given a clinical trial and have been reported:

1. Partial obstruction of the venous outflow of the myocardial circulation and reversal of the venous circulation with arterial blood as proposed by Beck.[14]

2. Production of an adhesive pericarditis by direct injury of the myocardial surface or by introduction of foreign material such as asbestos or talc into the pericardial space.[15]

3. The surgical approximation to the myocardium of organs with a luxuriant blood supply, such as the lung and segments of the intestinal tract.[16]

4. Transplantation of a systemic vessel into the myocardium to provide a new source of blood as described by Vineberg using the internal mammary artery.[17]

5. Endarterectomy to remove material obstructing the lumen of the coronary arteries.[18]

6. Creation of a fistula between the pulmonary artery and the left auricular appendage.[19]

Thus far no procedure has been sufficiently satisfactory to become established as an acceptable therapeutic measure.[20] The need for such a measure is so great that enthusiasm based on hope and the survival of patients upon whom operations have been performed has led to far too great an acceptance without sufficient scientific basis.

Cardiac Resuscitation. As interest and knowledge in the surgical treatment of cardiovascular disease have increased, cardiac resuscitation has become more successful. Ten years ago attempts were for the most part limited to patients sustaining cardiac arrest in an operating room. Thereafter it was attempted elsewhere, both within and without hospitals, by the surgical or open approach, and it was sufficiently successful to justify it as a reasonable procedure. More recently Kouwenhoven, Jude, and Knickerbocker[21] of Baltimore have described closed chest cardiac resuscitation which extends the opportunities for this endeavor.

The surgical or direct approach requires opening the chest and massaging the heart in order to propel blood through the vascular system while at the same time providing ventilation of the lungs. If ventricular fibrillation occurs, electrical shock is required to restore effectual contraction and normal sinus rhythm. While effectual, this method is not only cumbersome but is limited in its application because of its complexity.

The closed method developed at the Johns Hopkins University School of Medicine has the great advantage that it can be initiated for a greater number of persons under a wider variety of circumstances. With the patient on a rigid support, intermittent pressure at a rate of 60 times per minute is applied to the lower end of the sternum by the heel of one hand with the other hand on top of it. This will produce a good peripheral pulse and a systolic blood pressure ranging from 80 to 120 mm. Hg. This method also provides some ventilation of the lungs in the event that a second person is not available for mouth-to-mouth respiration.

The advantages of closed-chest cardiac massage are that a thoracotomy is avoided, and that it can be performed by relatively inexperienced personnel in almost any location and with no equipment. However, it should be noted that preparations should be made to diagnose ventricular fibrillation by electrocardiograph and to defibrillate electrically through the intact chest. A defibrillator capable of producing 400 volts or more is required for closed-chest defibrillation. This equipment is not available in all institutions.

Conditions of the Aorta and Its Branches

The aorta and its branches are subject to both congenital and acquired lesions. Examples of the former include coronary arteriovenous fistula, common truncus arteriosus, patent ductus arteriosus, and coarctation. Occlusive disease and aneurysms are the most common examples of the latter.

Gross anomalies of the aorta are clear-cut surgical problems, whereas congenital structural deficiencies such as are seen in Marfan's syndrome may exist undiagnosed until medial necrosis results in an aneurysm (Fig. 2).

There are two principal components of acquired lesions of the aorta. The first is an occlusive process that reduces the lumen, and the second is degeneration of the supportive structure of the wall predisposing to aneurysm formation, with elongation and kinking of the segments. Aneurysmal segments of the aorta become dilated not only in transverse diameter, but also longitudinally, thus resulting in kinking in relation to the normal or less involved adjacent portion.

Patients with detectable aneurysms of the aorta and its large branches are reported to have a life expectancy of less than two years. Three excellent studies dealing with life expectancy of patients have been reported by Estes,[22] Wright et al.,[23] and Gliedman et al.[24] It has been reported that when patients with aneurysms are not treated surgically, 70 per cent of them will die in three years, as compared to 12 per cent of the comparable age groups in the general population. Furthermore it was found at autopsy that of all patients with aneurysm, 96 per cent died from disease related to the aneurysm or its underlying cause. Those that are accessible may be resected or bypassed with homografts or prostheses. DeBakey[25] was the first to demonstrate in a series of several hundred patients that surgery could be accomplished with a low operative mortality rate (less than 5 per cent), relief of symptoms, and great increase in life

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FIG. 2. MARFAN'S DISEASE

Large transverse rent of intima in greatly enlarged segment of ascending aorta of patient with Marfan's disease.

expectancy. With the aid of the extracorporeal mechanism to take over the heart's work, the less accessible aneurysms in the proximal portion of the aorta are being successfully treated more frequently. Followng DeBakey's example, we and others throughout this country have been well pleased with the safety and satisfaction with which these major surgical measures can be accomplished in the older age group. The results of surgical treatment of reported aneurysms have been summarized by my associate, S. W. Moore. He collected reports on 542 non-ruptured abdominal aortic aneurysms. There were 58 postoperative deaths, a mortality of 10.7 per cent. In 74 which had ruptured, there were 36 deaths, a mortality of 49 per cent. At The New York Hospital–Cornell Medical Center,[26] over 75 patients with nonruptured aortic aneurysms have been treated surgically by resection or bypass, with four deaths or a mortality of 5 per cent. The average age of the group was slightly under 70 years. There were seven cases of resected ruptured aneurysms, followed by four deaths, or a mortality of 57 per cent.



FIG. 3. OCCLUSIVE ARTERIAL DISEASE

Cast of atheromatous material being removed from right common carotid artery. The circulation is maintained by bypass from proximal common carotid to distal internal carotid.

Occlusive Disease of the Arterial System

Occlusive disease of the arterial system which so frequently accompanies the aging process is being more adequately dealt with each year. Beginning with the segmental involvement of the distal aorta near its bifurcation into the iliacs, resection and later bypass procedures with plastic tube prosthesis have been done with encouraging results. The same basic process, so very frequent in the femorals and popliteal vessels, has been alleviated by applying the same principles where the vessels distal to these are sufficiently patent to carry a blood flow that will sustain the parts they supply. Actually the more diffuse the involvement and the smaller the normal lumen, the less likely are such procedures to compensate for the increasing ischemia.

Localized depositions of atheromatous material within the walls of the arterial system are by no means rare in the older age group both at the site where branches are given off and just distal to it. Within the past five years this type of lesion has been demonstrated to be the cause of considerable disability not only of the lower extremities but also of the brain, kidneys, and other organs. Some can be relieved by endarterectomy and removal of these cast-like obstructions. For example, cerebral

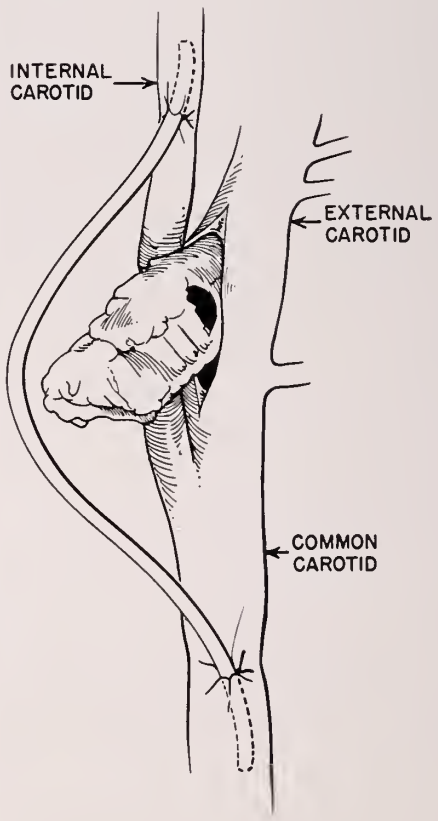


FIG. 3-A

Line drawing insert demonstrating relation of vessels.

ischemia with its many manifestations may be overcome by locating and removing such accumulations in the carotids distal or proximal to their origin (Fig. 3 and 3-A). Comparable lesions in the renal arteries give rise to hypertension. If the occlusion cannot readily be removed, it may be bypassed—the objective is to provide an increase in the diminished blood supply; this determines the degree of improvement. Coronary artery disease, as discussed above, is a part of this same problem, and like disease of the carotid and renal arteries may be attacked if the obstructive lesion is limited to a segment and the part distal is patent. The smaller the normal lumen of vessel that the surgeon has to work with, the greater are the difficulties in fashioning an anastomosis that will not be the site of thrombus formation in the early postoperative period. The fact must also be kept in mind that atheromatous disease of the arterial system is progressive; hence until it can be controlled surgical procedures are palliative even when the immediate results are dramatic. We must therefore anticipate both early and late failures due mostly to the characteristically generalized and progressive nature of arteriosclerosis, the most common cause of chronic occlusive vascular disease. That there are failures, however, should not cause under-evaluation of surgical intervention in chronic occlusive vascular disease, because, until ways are found to prevent arteriosclerosis, no other method of treatment offers such great benefits.

Acquired Conditions Due to Trauma

Since the beginning of surgery, traumatic acquired conditions of the cardiovascular system have been treated with some success. Present day approaches and greater availability of facilities make possible a better salvage of the acute injuries. Repair of the aorta and other large vessels with survival are becoming more commonplace, particularly in cases of rupture defects from impact as well as penetrating wounds. Lesions that become evident later, such as arterio-venous fistulae following accidents and sometimes surgical operations, are readily studied by angiocardiography and blood flow determinations. Advanced changes including cardiac enlargement with failure and ascites can be reversed, and completely disabled individuals returned to normal activity by closure of such arterio-venous fistulae. Bacterial endocarditis, one of the complications of such lesions, which formerly added to the hazard of the surgery required, is well controlled by preoperative antibiotic therapy. Aneurysms of the heart due to trauma and also those resulting from myocardial infarction can be excised with reasonable safety. Aneurysmal defects in the cardiac valves with dissecting extensions leading to fistula formation, formerly only seen at autopsy, are successfully treated surgically. The same is applicable to traumatic aneurysms of the vascular system.

Congenital Cardiac Anomalies

When Alfred Blalock performed his operation to relieve cyanosis of the tetralogy of Fallot, the laborious contributions of Maude Abbott on congenital lesions of the heart began to bear therapeutic fruit. Pediatricians and internists became much more interested in their diagnosis. Techniques in the study of physiologic abnormalities of these conditions and their radiographic manifestations became a stimulating field of investigation. Here began the clinical application of a series of corrective procedures directed at intracardiac congenital malformations. First these were indirect and palliative, such as Blalock's procedure and Brock's blind attempts to overcome pulmonic valvular stenosis by a valvulotome inserted through the right ventricle. Within a few years Kirklin[27] and others successfully corrected the defects included in the tetralogy of Fallot, with the heart open and in standstill. At present the results of surgery for this condition fall short of what is desired. But much progress has been made in a complicated anomaly, and the trend insures further progress in the future. Parallel to this have been the great strides in partial to complete correction of a large number of intracardiac malformations, which while less complicated, are often not very long compatible with life or ordinary activity.

In their embryological development, the valves of the heart are subject to malformations that result in variable deficiencies including partial absence, distortion and fusion of their leaflets, and stenosis of their orifices. The increased work-load placed upon the heart chamber proximal to an outlet obstructed or narrowed by stenosed valves results in hypertrophy that sometimes reaches such proportions that the outflow channel adjacent to the valve becomes reduced. Involved in order of frequency encountered, are the pulmonic, aortic, and mitral valves. Pure valvular involvement of the pulmonic, for example, is relatively simple to correct. Under direct vision and with the circulation maintained by the pump oxygenator, the risk is low, the mortality rate 0-3 per cent, and the results excellent. When there are associated conditions such as atretic vessels distally, as is seen in pulmonic and aortic stenosis, or when the valve ring is smaller than normal, more elaborate corrective procedures increase the risk and provide less satisfactory relief of symptoms. A congenitally stenosed valve orifice may become distorted, and when it is enlarged surgically may be rendered incompetent. This is of little importance in the pulmonic, but is tragic in the aortic or mitral. Perhaps in the future trans-

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plantation of the entire valve ring (homograft) will offer a better solution. What may take place following additional growth is, of course, unpredictable. Valvular malformations occurring together with septal defects and anomalous venous drainage constitute complex and challenging problems.

The embryological development of the heart is a highly co-ordinated sequential series of complicated responses to concomitantly occurring acceleration and retardation of growth in different groups of cells. Departures from the common pattern of cell growth and the rate at which it takes place result in congenital anomalies and malformations. Both atrial and ventricular septal defects are examples and they range from the minimal incompleteness of development in an insignificant defect such as foramen ovale to complete failure of growth with the absence of the entire septum between right and left atrium. Numerous factors probably play a role during embryological development. One of these, viral infection, has been well documented by Michaels and Mellin,[28] and Stuckey.[29]

A foramen ovale that remains patent is a defect in the technical sense. However, the common defect, the ostium secundum, results from the failure of the atrial septum to develop fully; it may vary greatly in size. Where the defect is located at the base of the auricular septum, it represents a persistent ostium primum. When both components fail to develop, there is to all intent and purposes no septum, and the two auricles remain as one common chamber. According to the size of the defect, the shunting of the blood may be little or great. Atrial defects should be corrected in early life. Using the open atrial approach this can be done with little risk. Our mortality rate for over 50 patients with secundum defects is 3.8 per cent. Kirklin, Lillihei, Swan and others have reported much larger series with a mortality ranging from 0 to 5 per cent.

The large defects with a common atrium may be closed with plastic prosthesis such as Ivalon constructing an atrial septum. While this may be accomplished without difficulty, the late results are yet to be determined and may depend upon the reaction to the prosthesis as a foreign body. Restoration of physiological hemodynamics provides for an excellent prognosis unless other changes such as pulmonary hypertension and congestive heart failure have progressed to an irreversible stage. Associated anomalies that may complicate the atrial defects include abnormal venous drainage and valvular deformities.

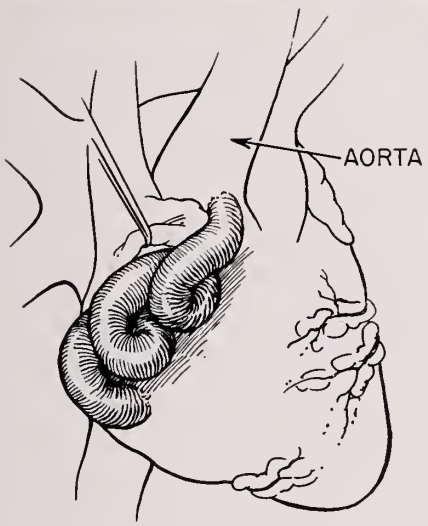
Interventricular Septal Defects

These may exist alone or in combination with other cardiovascular anomalies. They may be small, large, single or multiple, and of course, the septum may fail to develop at all. The greater the total area of defect between the ventricles, the greater is the shunt and the more nearly does the pressure of the right ventricle approach that of the left. Pulmonary hypertension and cardiac failure result. Small defects may escape notice and cause little disability, and until their surgical correction can be done with little risk they should perhaps be left unmolested. When larger defects and multiple ones remain uncorrected, the prognosis justifies the risk of morbidity of complications and the mortality rate. Precise criteria for surgical intervention have yet to be clearly delineated. Certain steps of the procedure are relevant to selection of patients for operation: first, the necessity for a large cardiotomy incision for complete examination of the septum; second, closure of defects requires the placing of sutures that may include or encroach or distort the conduction bundle with resulting temporary or long-lasting heart block; third, large defects have a higher incidence of partial or complete recurrence with suture alone than do multiple small ones. Patches of synthetic prostheses add to the hazard of a foreign body within the heart.

The actual status of the surgical correction of interventricular septal defects remains to be determined. The operative mortality and immediate postoperative morbidity of complications remains high, as recorded in reports from various clinics. Our experience has led us to follow Kirklin's policy, which provides for operating upon patients who meet rather rigid criteria. We have improved our morbidity and mortality figures by being more cautious in selecting patients. Only long-term follow-up evaluation of this group of patients will settle the question. In the meantime, it seems reasonable to follow a conservative course, recommending operation for patients without great increase in right ventricular pressures.

In addition to those discussed, there are several other cardiovascular anomalies that are being attacked surgically. As interest increases in these and as they are correctly diagnosed with more regularity, it is anticipated that many more will be dealt with successfully. At present these include anomalous pulmonary venous drainage, transposition of the great vessels, atresias and stenosis of the proximal portion of aortic and pulmonary arteries, lesions of diminished integrity of the aorta, cortriatriatum, and coronary arterio-venous fistulae (Fig. 4 and 4A). Activity in the study of the various aspects of cardiovascular disease is indeed comprehensive. Knowledge of the pathology and physiology marked the beginning that led to an understanding of the clinical manifestations. New and improved methods of recognition have come in turn. The sometimes crude and cumbersome procedures that evolve in attempting to correct them,





FIGURES 4 and 4-A

Coronary arterio-venous (right atrium) fistula

Retrograde aortogram with line drawing demonstrating enlarged right coronary artery entering right atrium, corrected surgically by multiple ligation with complete obliteration.

although sometimes ineffectual, serve to stimulate investigation. As has so often been true in medical science, prevention seems more desirable than correction or cure. At the present such an approach to the congenital anomalies and malformations of the cardiovascular system seems far-fetched. In one way or another, genetics may provide an avenue towards such an objective. A relationship between viral infections and patent ductus arteriosus seems well confirmed.

Discussion

The numerous conditions of the cardiovascular system amenable to surgical therapy may conveniently be divided into two main groups, congenital and acquired. Many of those in the first group are not compatible with life beyond a few days or months; others permit a normal life expectancy. While the majority are well tolerated during the early years, as secondary lesions are developed as a direct result of the malformation, disability increases and life is shortened. As a general rule, in acquired disease both the primary lesion or lesions and those secondary to them are progressive from onset. The rate of progression may vary greatly, from that seen in untreated subacute bacterial endocarditis which is rapidly fatal, to the arteriosclerosis that leads to coronary occlusion after the seventh or eighth decade. Nonsurgical therapy for most congenital lesions consisted mainly in restricting the patient's activities within the capacity of his cardiovascular system, in an effort to postpone failure or the development of irreversible conditions incompatible with life. In acquired lesions this approach has been effectively supplemented by drugs and diet in many instances. Symptoms were relieved and life prolonged by digitalis. Antileutic drugs have reduced the incidence and severity of vascular syphilis. Control of weight by diet and regulation of activity—and more recently antihypertensive drugs—have played a role in the control of hypertensive cardiovascular disease. Spectacular, indeed, has been the control and cure of bacterial endocarditis with the antibiotics. Diuretics have been an important addition in the medical therapy of a number of cardiovascular lesions ranging from constrictive pericarditis to myocardial failure.

Seldom does the internist completely overcome or remove the primary lesion in the treatment of cardiovascular disease. The surgeon can directly attack the basic lesion in many of the congenital conditions and occasionally in those of the acquired type. In the latter, a life-threatening lesion such as an aneurysm of the aorta may be removed or bypassed with a good likelihood that death will be considerably delayed before another aneurysm develops.

Thus it is not a question of selecting or advocating medical or surgical treatment of many of the lesions of the cardiovascular system. Rather it is a matter of one supplementing the other.

More progress in surgery pertaining to conditions of the cardiovascular system has been made over the past three decades than in the entire previous period of the recorded history of man. The events that are pertinent to this development have been briefly reviewed under the three categories: acquired heart disease, conditions of the aorta and its branches, and congenital cardiac anomalies. The current status of the surgical therapy being accorded these conditions with particular reference to the hazards and beneficial results is summarized.

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THE EARLY DIAGNOSIS OF CEREBRAL PALSY*

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A RENEWED and intensified interest in the early infantile manifestations of cerebral palsy has been one of the consequences of the study of prenatal and perinatal factors in the production of congenital anomalies and brain injuries organized by the National Institute of Neurological Diseases and Blindness in 1958. This involves an unbiased prospective study of 50,000 pregnancies over a five-year period by fourteen collaborating hospitals, with serial follow-up examinations of the resulting babies up to school age. Attention was directed at neonatal neurological signs, both as evidence of brain damage and as possible indications of conditions capable of themselves producing brain injury in the early days of life. Further thought was logically devoted to the neurological examination of infants in the first year or so of life, to detect abnormality at the earliest possible age in case the baby was lost from subsequent follow-up, and to distinguish early abnormality from possible effects of later insults to the central nervous system.

Conventional methods of neurological examination of adults can to a considerable extent be adapted for infants by special methods, but the early diagnosis of cerebral palsies depends relatively little on traditional localizing neurological signs. The major early clues involve abnormalities of muscle tone, and of the postural automatisms and attitudes in suspension in space, which are peculiar to infancy. These responses, and their interpretation, have been more fully discussed elsewhere,[1,2] and motion pictures are available.† This report is to consider their evolution in the presence of a deficit of motor function symptomatic of a chronic brain lesion, that is to say, of a "cerebral palsy."

Cerebral palsy is most accurately thought of as a symptom or a manifestation, one of a tetrad of areas of possible cerebral dysfunction from a chronic lesion of whatever cause (the others being mental retardation or irregularity, epilepsy, and cerebral sensory defects). Another requirement of the definition is that the lesion be acquired before or at birth, or at least during childhood, so that it involves an evolution of its manifestations and a distortion of the normal pattern of growth and development, not a subtraction from a fully developed and functioning central nervous system. This situation results in the physical features of a "cerebral palsy" being quite different in the early months of life than the ultimate form in later childhood or adulthood.

In the newborn period, the cardinal signs of brain abnormality include over-all depression of central nervous system activity, absence or asymmetry of the principal automatisms such as the Moro reflex, gross alterations of tone or of spontaneous movements, abnormal movements such as convulsions or myoclonus, cranial nerve paralyses, and signs of increased intracranial pressure or meningeal irritation.[2] Some of these signs are indications for immediate diagnostic or therapeutic measures, but their prognostic implications are for the most part obscure. They may evolve into a cerebral palsy or into developmental retardation, or both, but in other initially very similar cases the abnormal signs will disappear, to be followed by entire normality. Thus, in the neonatal period, one cannot in many cases distinguish the "brain-insulted child" from the brain-injured child.

Conversely, congenital cerebral defects are often "silent" in the early weeks of life, although such infants are frequently more stereotyped in their behavior than normal infants, and lack the conspicuous variability from one time to another which is so characteristic of the normal newborn. As an extreme example, even hydranencephalics often appear quite normal initially, unless one happens to transilluminate the head.

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Earliest Clues

The earliest clues to the existence of a congenitally abnormal brain usually appear at six to eight weeks of age, when responsive smiling to the mother is probably the first sign of the emergence of cortical function. Delayed interest in and response to persons and objects is often mistaken for blindness, but more frequently turns out to be a reflection of mental deficiency instead. Unless marked increase or decrease of tone persists from the first days of life, usually as the consequence of a perinatal injury to the brain, one becomes aware of strictly motor deficits only at two or three months. This is even true of the infant with future spastic hemiparesis, as pointed out by Byers[3] some years ago, but not always recognized.

The usual sequence of events is that the grandmother of an infant of three or four months notices that one arm is moved more frequently than the other, and that a month or so later, one hand is used for reaching and grasping to the exclusion of the other, which is kept fisted most of the time. By the time the baby is six or seven months old, the grandmother has convinced the mother, and by nine months or so, the mother convinces the doctor, who all too often has been attributing the situation to early right- or left-handedness. Strong hand preference before eighteen months should always arouse suspicion of some abnormality affecting the opposite limb. A relative paucity of spontaneous movement of one arm and one leg requires prolonged or repeated observation to permit the examiner to be sure of it. More constant fisting of one hand, and a tendency for one leg to lie in external rotation at the hip when supine, may enhance one's suspicions. In the first six months, confirmation is most easily obtained from asymmetry of the early infantile postural automatisms. By this is meant not the Moro reflex, which is probably subcortical in level and has in any event largely disappeared by the age with which we are now concerned, but rather such responses as placing and "parachuting." If an infant is suspended vertically with the examiner's hands under the axillae, and then brought up so that the dorsa of its feet are drawn against the underside of a table edge, first one foot and then the other (more rarely, both at once) is elevated and placed firmly on the table top (Figure 1). The response depends more on proprioceptive stimuli resulting from traction on the ankle joint than on cutaneous contact, and is present from birth, persisting until more or less suppressed by voluntary control. In infants with hemiparesis due to congenital porencephaly, placing is probably initially symmetric, but by approximately two months of age, the affected leg is placed poorly or not at all. Further information can often be obtained when the infant has completed the placing sequence and is "standing" on the table with the trunk supported by the examiner's hands. On suddenly lifting the baby vertically into the air, one should see both legs automatically flex at the hips and knees for a second or two, and then dangle again. This response is somewhat variable, but usually asymmetric in the presence of hemiparesis.

To test the parachute response, which should be present from the age of eight or nine months but rarely earlier, one suspends the infant horizontally in the air with his hands about its trunk, and suddenly plunges it toward a table top, or toward the floor. Normally, both arms are quickly extended out, as if to break the fall (Figure 2).

As the child grows older, muscular hypertonus appears, with a "stretch reflex" (increase of resistance on passive mobilization followed by a sudden jackknife type of give-way) which is usually evident earliest when the examiner attempts to supinate the forearm with the elbow extended. The asymmetry is subtle in early stages, and repeated testing and careful comparison with the opposite side is needed. Still later, hyperreflexia, ankle clonus, and obvious spasticity appear.

Because of lack of a normal side for comparison, the early diagnosis of what will be cerebral spastic tetraparesis (or tetraplegia, quadriplegia, or diplegia, more or less equivalent terms) is often more difficult than that of hemiparesis. The evolution of the picture also varies more from case to case, although there is a fairly usual sequence.[4] The patient is at first hypotonic in all areas, and is likely to be

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FIGURE 1

Placing response. Dorsum of left foot has just been brought up under table edge, and baby places it squarely on top of table. Age three weeks.

FIGURE 2

Parachute response in eleven-month-old baby as it is plunged toward table top.

FIGURE 3

Abduction, extension, and scissoring of legs in vertical suspension in space. Baby of four months with spastic diplegia.

brought in as a "floppy infant" (differential diagnosis must be made from the numerous other causes of this syndrome) with parental complaint of slow motor development. Later, but with quite variable rapidity, the limbs develop spastic hypertonus while the trunk and neck remain hypotonic for some months. The latter persistent hypotonia is most evident if one places the baby in the sitting posture (he will immediately slump to one side, or forward with head to the table), or attempts to draw him up to the sitting position from the supine by traction on the hands. Poor head and neck control in the latter maneuver is usually striking. Acquisition of independent sitting and standing balance is usually but not always considerably delayed in cerebral tetraparesis, in contrast to relatively modest delay in hemiparesis (unless accompanied by general psychomotor retardation). Hypertonus of the trunk and at the hips may develop in advance of sitting balance, so that, when pulled up from the supine posture, the infant "stands up rather than sits up," without flexion at the waist of the hip joints.

Legs More Severely Affected

In by far the majority of cases of future spastic tetraparesis, the legs are more severely affected than the arms, and the earliest diagnostic clue is usually extension, adduction, and frequently scissoring of the legs when the infant is suspended vertically in space by the axillae (Figure 3).

The placing response is usually depressed and ineffectual, and contrasts with a good positive supporting reaction, in which the legs stiffen at the hips and knees to bear a portion of body weight, when the infant (still in vertical suspension) is lowered to permit the feet to make firm contact with the table top. Like placing, this supporting reaction depends more on proprioceptive than on tactile stimuli; but the discrepancy results from an early increase in extensor tone in the legs, which is an asset in supporting but a disadvantage in placing. Comparison of the two automatisms often confirms early and subtle changes, of which it would be difficult to feel confident by direct manipulation of the limbs. Standing on the toes and scissoring of the legs are often observed while testing the supporting reaction. These phenomena must, however, be interpreted with some caution, since premature infants normally stand and walk (supported, of course) on their toes in the early months, and a tendency to scissor the legs is normal in the automatic "walking" or stepping of full-term infants, which persists for two or three months after birth in many instances. Adductor spasm or "grab," which is felt by the examiner on suddenly abducting the legs of the supine infant, is of course a well-known clue to spasticity, but appears later than the foregoing signs.

In horizontal suspension in space, the baby with spastic tetraparesis or with any other form of cerebral palsy involving delayed postural maturation is abnormally late in being able to raise his head and legs, and there is corresponding delay in the Landau reflex of flexion of the legs when the head is forcibly flexed by the examiner (Figure 4). One must bear in mind that similar delay occurs in the presence of any other hypotonic state (amyotonia congenita, Tay-Sachs Disease, mongolism, and others) and frequently with mental retardation alone, if accompanied by late motor milestones.

The parachute response is almost always late in appearance, and qualitatively poor, in babies with tetraparesis, and if asymmetric offers a clue to the side of great involvement. This response depends on visual as well as on vestibular stimuli, and is thus hard to interpret if vision is impaired.

Constant fisting of the hands beyond the age of four months is a major sign of tetraparesis, which will more often prove spastic than dyskinetic ("athetoid"). Delay in reaching and grasping, and a stiff manner of reaching, are subsequent stages in the evolving picture.



FIGURE 4

Landau reflex at eleven months. In horizontal suspension, forced flexion of head is followed by flexion of legs at hips and knees.

The tonic neck reflex of Magnus[5] is almost always abnormal in infants with bilateral cerebral palsies who lack sitting balance, and lack of the reflex under such circumstances is evidence strongly suggestive of some other diagnosis. A positive response consists in extension of the arm, the leg, or both in the direction toward which the head is rotated, with flexion of the opposite limbs. Abnormal tonic neck reflexes are rarely seen in the newborn, whether abnormal or not, but are to some degree a normal feature of the period from one to four months of age. They can to some extent be imposed at this age, when the examiner passively rotates the infant's head, the pattern appearing either immediately or after an interval of 15 seconds or so. However, the reaction should not be absolutely obligate and stereotyped on every occasion, and the baby should normally be able to break through the pattern on struggling. An obligatory response, which is maintained indefinitely on all occasions, is abnormal at any age (Figure 5). Normal infants may display a somewhat greater tendency to assume tonic neck patterns on active rotation of their own heads, than can be passively imposed by an examiner. By about six months of age, however, a baby should spend no greater proportion of his time in a tonic neck pattern than with the limbs in the contrary posture. It is obvious that interpretation as to whether or not a particular degree of tonic neck reflex is abnormal at an age under six months, requires some experience and judgment, but the response remains one of the most valuable signs of early cerebral palsies. One should be reminded that the sign is also present in Tay-Sachs disease and other degenerative encephalopathies, as well as after a diversity of postnatal decerebrating catastrophes.



FIGURE 5

Obligatory tonic neck patterns at age four months, maintained for an indefinite period despite patient's struggling. This degree of imposable pattern is abnormal at any age.

At four to six months, the tonic neck reflex begins to be succeeded by the neck-righting reflex. In the latter, when the head is actively or passively turned to the side, the shoulders rotate in the same direction, followed by the trunk, pelvis, and legs, so that the infant is then lying on its side. This is a useful automatism in getting from the supine position onto the side and then onto the abdomen, followed by getting up in the quadrupedal manner. It is retained in a degree until the child is able to get directly from supine to sitting to standing in the adult fashion. Thus a degree of neck-righting reflex can be expected to persist until a year or more of age, but in the later months it is more a mechanism of which voluntary use may be made, than an imposable reflex. Again, interpretation as to degree requires experience, but late-persisting and abnormally obligate neck righting reflexes are commonly found with cerebral palsies.

Clinical States

Even more than in the case of future bilateral spasticity, the evolution of the clinical picture varies with those infants who are to develop the dyskinetic types of "unwanted movement" (a better term than "involuntary," as it chiefly accompanies and complicates attempted volitional movement) usually categorized as extrapyramidal, or "athetoid." However, some of the commoner variations on the theme can be described and classified.[6] Opisthotonos, rigidity, abnormal Moro, and downward deviation of the eyes characterize the newborn with Kernicterus due to neonatal jaundice, but most other future "athetoids" are initially hypotonic (a type of the "floppy infant"). The tendon reflexes, however, are normal or even over-lively in contrast to the diminished muscle tone. The face is more often than not blank and inexpressive, even in patients who later prove to have normal intellect. The respiratory pattern may be disorganized. It should not be confused, however, with the paradoxical retraction of the chest on inspiration which is seen with amyotonia congenita or spinal cord transection, conditions which superficially resemble the extrapyramidal types of cerebral palsy in the early months. Tonic neck reflexes are usually conspicuous, and help greatly to distinguish the cerebral palsies from the other conditions mentioned. Achievement of sitting balance, and the ability to roll over, are almost always delayed, and the plac-

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ing, supporting, and parachute automatisms are absent or chaotic. In vertical suspension in space, the head lolls forward or backward or to one side, and the legs dangle. In horizontal suspension, the body usually collapses into the shape of an inverted letter "U." As the picture evolves, the baby is likely, but not certain, to develop dystonic spasms in which, spontaneously or especially on sudden shift of position, the head retracts as if in opisthotonos, the trunk becomes rigid, and the arms and legs extend, the arms being somewhat internally rotated and the hands usually fisted. These spasms, which also occur in the evolution of spastic diplegia, are momentary or of a minute's duration, and are distinguished from convulsive seizures by retention of consciousness and by the absence of clonic movements.

In the extrapyramidal group of cerebral palsies, the hands are less constantly fisted than in spasticity, but the fingers show a variety of disorganized and ineffectual postures. Reaching and grasping are delayed, and may be replaced by wild, totally ineffectual flailing motions. In other cases, athetotic postures and instability may be detected at as early as nine months by a keen observer. The earliest sign of athetosis is often an avoiding reflex of the hand, with spreading and hyperextension of the fingers, followed by skirting around the object and taking it with a back-handed grasp (Figure 6). It has been stated that athetosis develops, if at all, in most instances under the age of two and one-half years, in a significant proportion of cases not until three, but rarely under a year.[6] Early athetosis is commoner than usually recognized, but is more often ultimately mild than severe, possibly because the child who is going to have very severe athetosis later on, is usually unable to grasp at all in the first year or two. Finally, it should be added that pure athetosis is a relatively uncommon type of cerebral palsy. Most patients also have choreiform jerks or twitches, or show dystonia of the trunk and proximal limb musculature. Dystonia is frequently the most severely handicapping unwanted movement for walking and hand function, and even for speech, as it prevents maintenance of a steady uniform flow of air to the larynx. Dystonia of this type most commonly appears later than infancy, unless as a persistence in somewhat altered form of the dystonic spasms already referred to, which more frequently cease in late infancy, or are followed by hypertonicity.

Earlier diagnosis of "cerebral palsy," and to some extent a prediction of probable type, is considerably facilitated by knowledge of the clinical states mentioned, and by increasing experience with the automatisms and postural attitudes described. However, in every case one must consider the differential diagnosis of changing symptomatology gradually evolving from a more or less static brain lesion, from the highly similar symptomatology which may result from acute of progressive diseases, some of which are directly treatable. Prognostic statements can usually be made only after a series of examinations separated in time. A few infants show definitely abnormal findings of the types described, which later entirely disappear, with either mental normality despite slow motor development,[7] or else greater or lesser retardation. In other instances, the apparent type of involvement will change, and signs of spasticity or dyskinetic movements may appear in a patient first thought to belong in the other classification. Mixed types of cerebral palsy are not so uncommon as often believed, but are rarely apparent as such in infancy. The distribution may also undergo evolution: particularly, what is thought to be mono-



FIGURE 6
Early athetosis in child of one year, with avoiding reflex of hand.

paresis more often turns out to be hemiparesis, and paraparesis to be tetraparesis. The longitudinal follow-up of the collaborative study of the National Institute of Neurological Diseases and Blindness should ultimately do much to clarify the immediate implications and prognostic value of the infantile automatisms and postural patterns which have been described, but much use can be made of them in the meantime toward the earlier recognition of infants suffering from cerebral palsies.

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References

[1]Paine, R. S.: Neurological Examination of Infants and Children. Pediat. Clin. North America 7:471, 1960

[2]Paine, R. S.: Neurological Conditions in the Neonatal Period. Diagnosis and Management. Pediat. Clin. North America 8:577, 1961

[3]Byers, R. K.: Evolution of Hemiplegias in Infancy. Am. J. Dis. Child. 61:915, 1941

[4]Ingram, T. T. S.: The Early Manifestations and Course of Diplegia in Childhood. Arch. Dis. Childhood 30:244, 1955

[5]Magnus, R.: Körperstellung, Berlin, J. Springer, 1924

[6]Polani, P. E.: The Natural Clinical History of Choreoathetoid "Cerebral Palsy." Guy's Hospital Reports 108:32, 1959

[7]Illingworth, R. S.: Delayed Maturation in Development. J. Pediat. 58:761, 1961

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References

[1]Landsteiner, K., and Wierner, N. S.: Studies on an Agglutinogen (Rh) in Human Blood Reacting with Antirhesus Sera and with Human Isoantibiotics. J. Exper. Med. 74:309, 1941

[2]Carrel, A.: Results of Transplantation of Blood Vessels, Organs and Limbs. J.A.M.A. 51:1662, 1908

[3]Souttar, H. S.: The Surgical Treatment of Mitral Stenosis. Brit. Med. J. II:603, 1925

[4]Gross, R. E. and Hubbard, J. P.: Surgical Ligation of Patent Ductus Arteriosus. Report of First Successful Case. J.A.M.A. 112:729, 1939

[5]Crafoord, C., and Nylin, G.: Congenital Coarctation of Aorta and Its Surgical Treatment. J. Thoracic Surg. 14:347, 1945

[6]Gross, R. E., and Hufnagel, C. A.: Coarctation of Aorta; Experimental Studies Regarding Its Surgical Correction. New England J. Med. 233:287, 1945

[7]Blalock, A., and Taussig, H. B.: Surgical Treatment of Malformations of Heart. J.A.M.A. 128:189, 1945

[8]Gibbon, J. H., Jr.: Application of Mechanical Heart and Lung Apparatus to Cardiac Surgery. Minnesota Med. 37:171, 1954

[9]Glenn, F., and Stewart, H. J.: Mitral Stenosis Treated Surgically. Surg. Cl. N. America 41:445, 1961

[10]Braunwald, N. S.: Cooper, T., and Morrow, A. G.: Complete Replacement of Mitral Valve. J. Thoracic and Cardiovascular Surg. 40:1, 1960

[11]King, H.; Su, C. S., and Jontz, J. G.: Partial Replacement of the Mitral Valve With Synthetic Fabric. J. Thoracic and Cardiovascular Surg. 40:12, 1960

[12]Holswade, G. R., and Arditi, L. I.: The Diagnosis and Surgical Correction of Aortic Stenosis. Surg. Cl. N. America 41:463, 1961

[13]Hanfling, S. M.: Metastatic Cancer of the Heart. Circulation 22:474, 1960

[14]Beck, C. S.: Coronary Heart Disease After 25 Years. J. Thor. Surg. 36:329, 1958

[15]Thompson, S. A., and Raisbeck, M. J.: Cardiopericardiopexy; the Surgical Treatment of Coronary Arterial Disease by Establishment of Adhesive Pericarditis. Ann. Int. Med. 16:495, 1942

[16]O'Shaughnessy, L.: An Experimental Method Providing a Collateral Circulation to the Heart. Brit. J. Surg. 23:665, 1935

[17]Vineberg, A. M.: Surgery of Coronary Heart Disease. In: Cardiology, A. A. Luisada, Ed. New York, Blakiston-McGraw, 1959

[18]Sabiston, D. C.: Coronary Endarterectomy. Am. Surgeon 26:4, 1960

[19]Day, S. B., and Lillehei, C. W.: Experimental Basis for a New Operation for Coronary Artery Disease. Surg. 45:487, 1959

[20]Glenn, F., and Goldsmith, E. I.: The Surgical Treatment of Coronary Artery Disease. Surg. Cl. N. America 41:481, 1961

[21]Kouwenhoven, W. B.; Jude, J. J., and Knickerbocker, G. G.: Closed-Chest Cardiac Massage. J.A.M.A. 173:94, 1960

[22]Estes, J. E., Jr.: Abdominal Aortic Aneurysm: A Study of One Hundred and Two Cases. Circulation 2:258, 1950

[23]Wright, I. S.; Urdaneta, E., and Wright, B.: Re-opening Case of Abdominal Aortic Aneurysm. Circulation 13:754, 1956

[24]Gliedman, M. L.; Ayers, W. B., and Vestal, B. L.: Aneurysms of Abdominal Aorta and Its Branches. Ann. Surg. 146:207, 1957

[25]DeBakey, M. E.; Cooley, D. A., and Creech, O., Jr.: Aneurysm of Aorta Treated by Resection. J.A.M.A. 163:1439, 1957

[26]Moore, S. W., and Wantz, G.: Abdominal Aortic Aneurysm. Surg. Cl. N. America 41:497, 1961

[27]Kirklin, J. W.; Payne, W. S.; Theye, R. A., and DuShane, J. W.: Factors Affecting Survival After Open Operation for Tetralogy of Fallot. Ann. Surg. 152:485, 1960

[28]Michaels, R. H., and Mellin, G. W.: Prospective Experience With Maternal Rubella and the Associated Congenital Malformations. Pediatrics 26:2 (Aug. 1960)

[29]Stuckey, D.: Congenital Heart Defects Following Maternal Rubella During Pregnancy. Brit. Heart J. XVIII:519, 1956

SPEAKING OF SUNDRY ITEMS

What's in a *medical* bill?

Practically everything that can be stuffed into and under the family medicine chest, including Fido's flea powder.

According to federal calculations, Americans spent $4.8 billion in 1959 for drugs and appliances. More than $500 million of this expenditure went for such items as water bottles, fountain syringes, household gloves, ice bags, heating pads, sun lamp bulbs, sun glasses, first aid kits, snake bite outfits, and pharmaceutical preparations for pets and for use by veterinaries.

Progress Notes . . .

PRESENT-DAY MANAGEMENT OF DIABETES*

GARFIELD G. DUNCAN, M.D.

The Author. *Garfield G. Duncan, M.D., Professor of Medicine, University of Pennsylvania; Director of Medical Divisions of Pennsylvania Hospital and Benjamin Franklin Clinic, Philadelphia, Pennsylvania.*

PROGRESS IN THE TREATMENT for diabetes has complicated rather than simplified the remedial program employed. There is a wide variety of diets, each one of which has its advocates; there are eight insulins and a variety of mixtures of insulins to select from; and there are three oral preparations which may be employed singly or combined and with or without insulin.

The appropriate selections from these measures for the individual diabetic patient presuppose an understanding of diabetes in the broadest sense and of the properties of the drug or drugs selected. The failure to employ the optimal advantages at hand by partial treatment may be because authorities in this subject have not achieved their teaching objectives; the physician may never have had the opportunity of seeing diabetes well controlled and the gratifying results that ensue; or, it may be his doctrine that partial treatment is good enough. Alone or combined, these shortcomings encourage the progression of degenerative changes. It is not enough to make a severe diabetes appear mild or to secure adequate control for only a few hours out of each twenty-four. Partial treatment is better than none but surely it permits a harvest of tragedies.

It is because of the inferences indicated above that attempts have been made to put various measures in their appropriate perspectives and, in doing so, involve principles that could be put to good advantage in plans other than those outlined. Also, it is better that we should attempt to simplify therapy without restraint than to let the profession be infused with one-sided but nevertheless simple plans born of commercial interests.

The Diet. Total Calories

Reduction of the total caloric intake sufficient to reduce the overweight is desirable. This effective measure will suffice to control the diabetes, barring acute complications, in the majority of diabetic patients.

For the overweight patient having no acute complications, one has the choice of supplementing undernutrition with an oral agent. The patient develops the proper perspective, however, if success is achieved by diet alone. Otherwise, the diet becomes secondary in importance to drug therapy. If the attractive temptation to substitute drug therapy for undernutrition is adopted, glycosuria is corrected and the obese state is intensified as a result. Is this better or worse than allowing glycosuria to neutralize the surplus dietary intake and by doing so encourage the progression of degenerative changes? Both schemes represent clinical failures. There is no legitimate substitute for the reduction of the obese diabetic.

Occasionally control of the diabetes in the obese patient with the aid of tolbutamide, chlorpropamide, or long-acting phenformin serves the purpose of alleviating the intense desire for food that is often associated with uncontrolled diabetes. Drug therapy should be eliminated as soon as the reduced caloric intake is adequate to control the diabetes.

Carbohydrate

The carbohydrate is necessarily reduced in the undernutrition regimen. For diabetics who are normal or under normal in weight and who are receiving liberal diets, we have steadily increased the carbohydrate allowances until they are as close as is practicable to that in the diet for the normal individual without appreciably increasing the difficulty in controlling the diabetes. Quotas as high as 250 gm., or more, are common. Satisfactory blood sugar levels around the clock are obtained in most cases with such allowances when appropriate insulin therapy and distribution of the diet are maintained. In the final analysis, it is the total calories and not the carbohydrate that exerts the greatest effect on the need for insulin.[1]

The liberalizing of the carbohydrate permits less fat. One wonders how much the relatively high fat content of diets for diabetics has contributed to the progression of atherosclerosis. I am convinced that it has had this effect; hence we allow more liberal amounts of protein and carbohydrate in diets for

*The Fried Lecture presented at the Newton-Wellesley Hospital, Newton, Massachusetts, April 20, 1961.

our patients than is generally employed or was formerly the case in our own practice. The subsidence of anginal attacks in the atherosclerotic diabetic with an elevated serum cholesterol when the fat content of the diet is low and when it is provided, for the most part, in the unsaturated form is sufficiently frequent to warrant an exploratory long-term application of this regimen. The beneficial effect in cases of diabetic retinitis when the fat content is reduced to 20 gm. per day is an added stimulus to give this plan of diet therapy in such cases an adequate trial.[4]

Insulin Therapy

Plans of insulin therapy which have stood the test of time and comparative studies are:

(A) A single dose of an intermediate-acting insulin (Globin, NPH or Lente) given one hour before breakfast. Employed for relatively mild cases, in which the subjects are not overweight, this regimen, when adequate, has been largely replaced by oral therapy.

(B) A mixture of a rapidly acting and an intermediate-acting insulin, notably NPH (Isophane) insulin, given before breakfast, is used when an intermediate-acting insulin fails to prevent hyperglycemia during the forenoon. Some of these patients achieve good control with tolbutamide, chlorpropamide or long-acting phenformin without insulin.

(C) For the juvenile type of diabetes characterized by marked lability of the blood sugar, an additional small evening dose, after supper, of an intermediate-acting insulin is necessary to avoid nocturnal hyperglycemia. This dose is usually given after, but in some cases before, supper, and in others at bedtime. None of my patients who has needed this plan of insulin therapy has been able to substitute oral therapy for it. A small percentage achieve adequate control with a mixture of 2:1 or 3:1 of crystalline and protamine zinc insulins. Beyond this occasional use, there is no apparent need for protamine zinc insulin in the therapy for diabetes.

(D) Crystalline insulin has a quicker blood sugar lowering effect than semi-lente insulin and hence is the insulin of choice in the early management of the ketotic patient. Either of the rapidly acting insulins, crystalline or semi-lente, is well suited for the management of diabetes during acute complications when the diet is divided into four equal feedings given at six-hour intervals.[2] All insulins are effective in reducing the blood sugar, and while various combinations and mixtures may serve well, we have found that the foregoing plans of therapy, as illustrated in Table 1, give the most predictable results.

Oral Therapy

Oral drug therapy idealistically has a small field of usefulness in the treatment of diabetes. Realistically the opposite is the case. If we agree that 80 per cent of the diabetic population is sufficiently overweight to allow control of the diabetes by restoring a normal nutritional state, none of these patients is a candidate for oral therapy. To these can be added at least an additional 5 per cent, the juvenile diabetics, and another 5 per cent who are adults but who have a juvenile type of diabetes in whom the sulfonylureas are ineffective. There remains 10 per cent who are "ideal" candidates for sulfonylurea therapy. These patients are not overweight and have an adult-acquired stable type of diabetes. They cannot afford to lose weight, but tolbutamide, chlorpropamide, or long-acting phenformin (DBI) may be satisfactorily effective in at least 75 per cent. Though this is the ideal group, yet in it most secondary failures to sulfonylurea therapy occur. It should be said, however, that the diabetes in some of these cases has been more easily and better controlled with a sulfonylurea than with insulin.

Sulfonylurea Compounds

(A) Tolbutamide is the drug of choice *if* good control of the diabetes is achieved with it. Side effects are rare if the daily dosage does not exceed 1 gm. Half a gram of tolbutamide given before breakfast may suffice. If more is needed, the same amount is given before lunch. These two doses exert their maximum blood sugar lowering effect during that period of the 24 hours when three meals are consumed in relatively close succession, and this effect is on the wane during the night when no food is taken.

(B) Chlorpropamide, unlike tolbutamide, attains a blood sugar lowering concentration in the blood which is maintained throughout the 24 hours by the administration of one dose per day. Also, it is significantly more potent than tolbutamide in its blood sugar lowering effect. Because of these features, hypoglycemic episodes may occur between midnight and breakfast, hence the need of giving a bedtime nourishment. The maintenance daily dose of chlorpropamide varies from 0.25 to 1.0 gm. Half a gram is the amount most frequently used.

These two sulfonylurea compounds are ineffective in the juvenile diabetic or in the adult who shows prompt and increasing amounts of acetone in the urine when the amount of insulin given is appreciably reduced. Furthermore, they are ineffective during febrile episodes and infections. Whether or not these drugs will serve as effective supplements to insulin therapy in the "juvenile type" of diabetes is not definitely established. In our experience, when apparent benefit was noted, it appeared

continued on next page

to be attributable to increased attention to the diet, by the less reliable patients, during the studies.

An appreciable reduction in the amount of insulin needed has, however, been noted in our experience[3] in the very occasional patient who is normal in weight or is underweight, has a labile diabetes, and requires unusually large amounts of insulin, between 100 and 200 units. This result is exceptional. These rare patients violate the usual rule in that they develop ketosis readily with a considerable reduction in the insulin dosage, and yet the sulfonylurea has a moderately favorable effect on the insulin requirement but not to the degree which would allow its omission. The relative places of the three oral preparations in the treatment of diabetes in its various grades of severity are indicated in Table 1.

Phenformin (DBI) is a blood sugar lowering biguanide effective in severe and labile as well as mild adult-acquired diabetes. In its rapidly acting form, it has its chief field of usefulness in the treatment of patients with labile diabetes. When tolerated, it reduces somewhat the need for insulin and tends to decrease the apparent lability of the diabetes.

The high incidence of nausea and vomiting, 20-50 per cent, caused by the rapidly acting phenformin in commercial use, curtails greatly its field of usefulness. However, these side effects can be considerably reduced and prevented if the initial dosage is small, 12.5 mg. with each meal with increases of 12.5 mg. to each dose at two or three day intervals. A total dosage above 150 mg. per day is rarely indicated.

A long-acting phenformin has increased the potential value of this drug. The active principle in this product is released gradually over a twelve-hour period. This slow release permits a longer and more uniform action, but of special value is the remarkable decrease in the incidence of gastrointestinal disturbances when contrasted with the effects of the rapidly acting phenformin. Doses of 100 mg. before breakfast and an equal amount or less before supper have in some cases eliminated the need for an evening dose of insulin, have reduced the total amount of insulin needed, and have reduced the lability of the concentrations of sugar in the blood.

SUMMARY

There is no substitute for diet therapy in the treatment of diabetes. Claims that more than one half of the known diabetics in this country are receiving tolbutamide suggest a gross violation of this conservative truism.

More liberal quotas of protein and carbohydrate are indicated as a practical means of reducing the fat content of the diets. This seems to be especially desirable for the atherosclerotic patient with hypercholesterolemia. Also, in these cases benefit accrues when the fat is provided in a high proportion of unsaturated forms.

Insulin in one form or another, or in suitable combinations, and with proper timing of its administration, is the most effective anti-diabetic agent known.

Oral therapy is a treatment of convenience and not of necessity. The sulfonylureas are most effective, numerically, in those patients whose diabetes can be controlled without drug therapy. They have, however, a justified place in the management of

TABLE I
Contrasting Therapies for Diabetes

Established Illustrative Therapies	Current Therapies — 1961
I. Diet Only Overweight Patient	Diet Only — Except in Selected Cases. Tolbutamide, Chlorpropamide or Phenformin (Long Acting) in Selected Cases
II. Small Dose of an Intermediate Acting Insulin Before Breakfast Patient a Trifle Overweight or of Normal Weight	Insulin Usually Replaced by Tolbutamide, Chlorpropamide or Phenformin
III. Intermediate Acting Insulin With Crystalline Insulin Added, e.g., 24 Units NPH and 8 Units Crystalline* Before Breakfast For Underweight Adult With "Adult-Acquired" Diabetes	Secondary Failures to Sulfonylurea Therapy Most Frequent in Underweight Adults
IV. Intermediate and Rapidly Acting Insulins, as a Mixture Before Breakfast and a Small Dose of Intermediate Acting Insulin After Dinner For Patients With Labile Diabetes	Insulin Supplemented by Phenformin (Long Acting). Evening Insulin May be Replaced, Total Dose of Insulin Reduced and Lability of Diabetes May be Reduced

*Mixtures of Lente and Semi-Lente Insulins May Serve Equally Well.

approximately 10 per cent of diabetic patients. They are effective supplements in the treatment of the overweight diabetic but the likelihood that such effective agents might receive widespread adoption as a substitute for appropriate dietary measures must be guarded against. Failing in this would, and apparently does, mean that diabetes in this preponderant group of overweight subjects is not being as well treated, in the over-all picture, as it was before these drugs were available.

Phenformin is a potent blood sugar lowering agent and may prove to be of long-term value in the management of the mild as well as the juvenile types of diabetes. This has not yet been established. Phenformin is not considered a suitable substitute for sulfonylurea compounds in cases in which the latter are satisfactorily effective.

The optimum therapy for diabetes depends upon diet, insulin, and oral preparations being kept in their proper perspectives.

References

[1]Allen, F. M.: Clinical Observations with Insulin. 3. The Influence of Fat and Total Calories on Diabetes and the Insulin Requirement. J. Metabolic Res. 3:61, 1923

[2]Duncan, G. G.; Fetter, F.; and Durkin, J.: The Equal Division and Distribution of the Diet and Insulin in Treating the Diabetic with Surgical Complications and Acute Infections. Surgery 1:939, 1937

[3]Duncan, G. G.; Joiner, C. L.; and Lee, C. T.: Sulfonylurea Symposium; Methods of Selection of Diabetic Patients Sensitive to Sulfonylurea Compounds. Metabolism 5:964, Nov. (pt. 2), 1956

[4]Van Eck, W. F.: The Effect of a Low Fat Diet on the Serum Lipids in Diabetes and its Significance in Diabetic Retinopathy. Am. J. Med. 27:196, 1959

PHYSICIANS WHO PERFORM SURGERY

Briefly, about 7 in 10 of the in-hospital surgical procedures in this country during 1957-58 were performed by specialists in surgery (either full-time or part-time) and about 3 in 7 of all these procedures were by board-certified surgeons. About 30 per cent of the in-hospital surgical procedures were performed by physicians who reported that they did not specialize in surgery. Among them, general practitioners in private practice accounted for the largest proportion, 22 per cent of all surgical procedures.

Full specialists in surgery and board-certified surgeons did a larger share of the surgery performed in the following hospitals than they did in other types of hospitals: "accredited" hospitals, large hospitals, and hospitals located in counties within smaller metropolitan areas. Compared with other doctors they were more likely to perform gastrointestinal and urinary operations, less likely to perform dilatation and curettage (unrelated to miscarriages), tonsillectomy and/or adenoidectomy, and appendectomy. Their patients stayed longer in the hospital.

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THE JOHN F. KENNEY CLINIC DAY PROGRAM

Pawtucket Memorial Hospital

Wednesday, October 25, 1961

MORNING

10:00 A.M....

A TERM EXTRAUTERINE PREGNANCY
(A Case Report)
HENRY E. TURNER, M.D.

10:20 A.M....

CONGENITAL HYPOTHYROIDISM
JOSEPH H. DOLL, M.D.
ORLAND F. SMITH, M.D.
PHILIP J. LAPPIN, M.D.

10:55 A.M....

THE ESOPHAGEAL EKG IN THE DIAGNOSIS OF CARDIAC ARRHYTHMIA
ARTURO LONGOBARDI, M.D.
EDWIN F. LOVERING, M.D.

11:15 A.M....

LUNG BIOPSY
JOHN J. YASHAR, M.D.

11:35 A.M....

INTERCOSTAL PHENOL NERVE BLOCK
EDWARD DAMARJIAN, M.D.

12:30 P.M....

LUNCHEON

AFTERNOON

2:00 P.M....

A SYMPOSIUM ON SOME OF THE CLINICAL PROBLEMS RELATED TO THE UPPER GASTROINTESTINAL TRACT

Presented by the Lahey Clinic

F. WARREN NUGENT, M.D.
Department of Gastroenterology

CORNELIUS E. SEDGWICK, M.D.
Department of Surgery
DAVID JOHNSTON, M.D.
Department of Radiology

Followed by

ROUND-TABLE DISCUSSION

Moderator: RUSSELL S. BRAY, M.D.
Department of Medicine
Rhode Island Hospital

Editorials

FOREIGN TRAINED PHYSICIANS IN RHODE ISLAND

There are 162 graduates of foreign medical schools licensed to practice in Rhode Island, exclusive of the forty-eight graduates of Canadian schools and of those physicians who have become licensed during the past year. There are also about thirty who are training as interns or residents, and six or seven who are working in laboratories or serving as "clinical clerks" while awaiting the American Qualification Examination which will be held next October. Of the interns and residents who have received either full or temporary certification by the Educational Council for Foreign Medical Graduates only ten are interns. Exclusive of the Rhode Island Hospital whose twenty interns are all graduates of American universities, there are forty-six approved internships in Rhode Island. This means that thirty-six positions are unfilled.

The waste of existing opportunities for foreign graduates in our state is also not without its damage to our citizens. The presence of interns enables a hospital to furnish more complete and better care to its patients than is possible without such a staff. A good group of interns and residents insures that the care of the sick will be prompt and complete. Furthermore, it is well understood that physicians and surgeons who are the teachers of interns and residents must keep themselves well in touch with the progress of modern medicine. Thus the house staff contributes to the practice of better medicine by the attending staff.

The present shortage of foreign graduates available for appointment as interns is due to the ne essity for the Council on Medical Education and Hospitals of the American Medical Association to insist that clinical care of hospital patients be carried out by house officers who are graduates of foreign medical schools only if these physicians have received either full or temporary certification by the Educational Council for Foreign Medical Graduates or are fully licensed in the state in which they are located. The main purpose of the plan is, of course, to assure that American citizens be cared for by physicians of whose competence there can be reasonable assurance. Previous to its implementation it was not possible for a hospital to be certain that doctors accepted as interns were really qualified. In some instances, despite every effort on the part of hospitals to make careful selections, poorly trained interns have served on hospital staffs. With the present regulations in force, the hospitals and their patients have a reasonable degree of protection against such a situation. Unfortunately in some instances it has meant instead of the risk of having some substandard interns, the certainty of having none at all.

Thus far approximately 26,000 foreign trained physicians have taken the American Qualification Examinations of the E.C.F.M.G. and about 19,000 have obtained either full or temporary certification. How then can one explain the shortage of physicians available for appointment as interns? As there are over 5,000 more approved internships than can be filled by American and Canadian graduates should not the number of certified graduates of foreign schools be more than ample to fill the need? It should but it doesn't.

This is the probable explanation. Of those who have become certified a large number were at the time of the examination already on duty in American hospital residencies or in internships which they have now completed. Such physicians are either continuing graduate training, have taken other positions, or have returned to their homelands. Of those who have recently passed the examination abroad a number have been delayed in coming to the United States because of inability to attain visas under the present immigration laws. Such physicians will eventually arrive but at the moment, despite requests for preferential approval, many will have to wait for months or years for their turns in the overloaded quotas of their countries of origin. One hospital in this state holds six or more contracts signed by foreign doctors who have not yet been able to obtain visas.

It is not possible to be at all certain of the future. An increase in the number of certified foreign graduates coming to this country for clinical experience in medicine seems most probable. That there will be a sufficient number to fill all available approved internships in our hospitals seems most unlikely. As a result there will be competition for those who come. Beyond a doubt the value of an intern staff

has been definitely emphasized to attending physicians and surgeons because many have had to add the duties of interns to their already heavy responsibilities of practice. What can they and their hospital administrators do to increase the likelihood of success in the rehabilitation of their internships? It is safe to say that offers of excessive stipends will get them nowhere as it is generally understood by applicants that the hospitals presenting this kind of inducement have little else to offer. On the other hand the furnishing of good living conditions, especially for the families of married interns, is a very legitimate and reasonable way to attract good candidates. The main factor, however, is and has always been the quality of the educational experience which a hospital can furnish to the graduate, either foreign or American. It therefore behooves those hospitals which are now without interns, or are working with definite shortages, to increase the quality of their educational programs and to enhance the reputation of their hospitals in this field. That the approval of a number of training programs may be canceled seems most likely. The community hospital of the future must be an educational center and those hospitals which are able to achieve and deserve a high reputation in this phase of their work will be the ones whose patient care is enhanced by the work of interns and residents.

THE RHODE ISLAND STATE DIVISION OF ALCOHOLISM

QUIETLY AND WITHOUT FANFARE this excellent unit of the State Department of Social Welfare marks its tenth anniversary. Founded in 1951 upon recommendation of a special commission appointed in 1949 by the then Governor Dennis J. Roberts, it has pursued its objectives efficiently and with devotion. Its present staff, headed by Doctor Antonio Capone, consists of five physicians, including specialists in psychiatry, and seven technical associates of various categories, representing social service, nursing, and clinical psychology. Its permanent headquarters are at 94 Doyle Avenue, in Providence, where regular clinics are held. Contact can be made in Woonsocket and Westerly through public assistance facilities, and in Newport, where a weekly clinic is held. There is a permanent Advisory Council of fourteen responsible citizens, headed by a psychiatrist and having representatives of the clergy, the medical profession, and the bench.

Contact with the Division's treatment facilities is simplified by permitting application by the patient with or without appointment by telephone, or in person. Application may also be made by the patient's family, his employer, clergyman, or any interested party. The Division looks upon alcoholism as a sickness constituting the fourth largest public health problem in America, and yet one that is amenable to treatment. Any alcoholic can be helped, *if he is willing to accept assistance.*

The work of the Division is divided into four categories: treatment, education, prevention, and research. Outpatient treatment is provided in the Division's own clinics. In addition it arranges for hospitalization when necessary, and provides social service and rehabilitation counsel. Its educational program is directed variously to the general public, professional groups, for which it also provides consultative services, and civic and community groups. School and college students are reached through discussion groups and through teacher training. Finally, the Division conducts clinical research on treatment techniques, various drugs, causative factors, and personality attributes. Treatment is available to any resident of Rhode Island who applies for help. There is no connection with Alcoholics Anonymous, but suitable patients are not infrequently recommended to that program.

An excellent and intelligent brochure titled *Facts and Fancies About Alcoholism,* written by Helena H. Shea, the Division's chief clinical psychologist, is available upon request both to patients and to members of the medical profession.

MATERNITY CARE: A NEW CONCEPT

THAT there has been a progressive decline in maternal mortality is amply demonstrated by recent statistical studies. These studies also show that there has been a significant increase in the frequency of early visits to a physician, average number of prenatal visits, and use of hospitals for delivery. Surely it is not stretching any cause and effect relationship to conclude that a decline in mortality results from improvement in prenatal care. Many diseases once considered incompatible with a successful pregnancy may now be adequately treated with a resulting healthy live infant.

Lack of education is at least as important a deterrent to the wide use of medical care as is low income. This was demonstrated in a recent five-year survey of the extent of maternity care in the United States. The survey was conducted jointly by Health Information Foundation and the National Opinion

continued on next page

Research Center, University of Chicago. The results of this study were compared with those of a parallel study conducted five years earlier. In both periods, the percentage of prospective mothers first seeing a doctor early in pregnancy increased with the educational attainment of the mother. Thus in 1952-53 those seeing a doctor during the first trimester of pregnancy constituted 42 per cent for the group of "eighth grade or less"; 58 per cent for those with "some high school"; 72 per cent for those having "completed high school," and 90 per cent for those with "some college." In the 1957-58 survey, the comparable figures had risen for all except the "some college" mothers to 57, 75, 79, and 88 per cent respectively.

In both periods, the expenditure for maternity care per family varied from under $100 to over $300.

	1952-53		1957-58	
Expenditure per Family for Live Births	Hospital & Home Births Combined	Hospitalized Births Only	Hospital & Home Births Combined	Hospitalized Births Only
Less than $100	20%	11%	9%	8%
$100–$299	61%	69%	53%	54%
$300 & over	18%	21%	38%	28%

Among hospitalized mothers of low income families, 11 per cent received free hospital care in 1952-53, and 9 per cent in 1957-58. In the 1952-53 survey 3 per cent never saw a doctor; 6 per cent saw a doctor, but paid nothing.

The proportion of mothers receiving care early in pregnancy increased markedly between the two surveys. Those seeing a physician during the first or second month rose from 38 per cent to 51 per cent; those seeking medical care by the end of the third month rose from 65 per cent to 77 per cent. Conditions thus are improving, but there is still considerable room for progress.

As late as 1935, maternal mortality varied between 60-70 deaths per 10,000 births. As a result of continued advances in the therapy and control of maternal complications, this tragic rate has now decreased to 3.8 per 10,000 live births in 1960. Yet there still remain mothers in the prime of life who die. Why? The use of health services in maternity care, the expenditures for this purpose and the insurance benefits covering these expenditures, and the free care generally available for those who cannot pay for obstetrical services all show an increase in the five-year span covered by these two comparable surveys. Maternity care now accounts for about 5 per cent of all out-of-hospital visits to physicians in this country, as well as 11 per cent of the nation's total private expenditure for all health services. This is a trend in the right direction; but obstetricians still have not convinced enough patients that early and more frequent visits have important preventive benefits which will pay dividends in better health for both mother and child.

Preconception care, as a routine part of maternal service, is a new concept, and offers a means of reaching the prospective patient early. A wise physician once said that he could save more mothers and more babies if he were to see each pregnant mother the night before she conceived. This logically implies providing instructions at the teen-age level. Physicians should participate in organized pre-marriage and marriage health seminars. Advice on the importance of children in the family, the fertile period, and the signs and symptoms of pregnancy provide the young couple with a sobering view of the purposes of marriage and establishes a healthy doctor-patient relationship. The couples oriented by preconception instruction are natural candidates for early prenatal and postnatal care.

An informed public is essential, if better use is to be made of available preventive medical services and the future health of both mother and child assured. If a pattern of positive preventive medicine can be established with the mother in prenatal —or even better, preconception—care, this pattern of behavior may carry over into the management of subsequent illnesses. A mother who has gained a favorable impression of her maternal care and who has been convinced of the value of preventive medicine will see to it that her children and husband are also protected. The doctor-patient relationship also is improved by thus establishing good will. The process of bringing about this recognition and appreciation of the value of medical services is one primarily of communication.

The Rhode Island Department of Health, through its Maternal and Child Health Division in co-operation with the United States Department of Health, Education and Welfare Children's Bureau has developed a pilot program of mothers' classes for expectant mothers. Physicians in the Rhode Island area can refer their patients to these classes, which are limited to fifteen members each. The group discussion method is used, rather than that of a set curriculum, and the emphasis in the discussion groups is on patient-centered care within a family-centered atmosphere. By seeing other members in the group who are "in the same boat," the mothers' learning has a more personal mean-

ing. This group participation impels the mother to take the doctors' instructions more seriously, thus influencing a more intelligent behavior in this respect in all members of the family.

Emphasis on positive preventive medical care, emphasis on the total maternity care concept, emphasis on an active program under the doctor's supervision for early education of the couple may help to bring about a desirable open line of communication between available medical care and the potential patient. Thus the purpose of medical services is not primarily the treatment of illness, but rather the warding off of potential ill-health. This is the dividend on an investment in preventive medicine, using medicine to build in a positive sense rather than to mend.

THE SCRUB NURSE — A VANISHING SPECIES

...The scene is at one P.M. in a general hospital. The surgeon who could not get any operating room space in the morning has gulped down two cups of cold, bitter coffee and is waiting for the morning crew to vacate the room. When he finally enters the scene an hour late, he finds a circulating nurse showing the instruments to a recent graduate who has only scrubbed twice before. There are three student nurses standing around as observers, a nurse's aide whose aseptic conscience has not yet been developed, and a number of nondescript floating personnel who are scrubbed, capped, and masked for "on the spot" training.

The exploration of the common duct proceeds slowly. The surgeon is aware of this, since at another teaching institution he would now be halfway through. By three o'clock, the nursing staff shows signs of visible and audible restlessness. The changing of the guard is about to take place, some of whom may never show up, but the characters who now appear defy description and may be a subject of another communication. With much moving about, stirring up air currents, bacteria, and overhead lights, the new shift has taken charge.

The circulating nurse is a grandmother who now helps out her alma mater. The instrument nurse likes the afternoon shift because she can sleep late in the morning. She is quite bright and has two interns in tow, one of whom might take her back to South America where, she gathers, one has a lot of servants. She has not the slightest interest in surgical procedures or in her role as part of the team. She is well aware of the vast shortage of nurses and knows that the chief has indoctrinated his staff to be lenient and understanding with the operating room personnel — "otherwise we will have nobody!"

The operation proceeds slowly with occasional interruptions because of lack of certain instruments, even although the surgeon is an accomplished technician. It terminates with one sponge missing, to be found after a long search, in a bucket, discarded by one of the "on the spot" trainees, saddled by this time with an instructor....

...Excerpt from Editorial
SURGERY, GYNECOLOGY & OBSTETRICS, April, 1961
by Geza de Takats, M.D., F.A.C.S.,
Chicago, Illinois

KENNEY CLINIC DAY
Wednesday, October 25, 1961
Pawtucket Memorial Hospital

SEMINAR ON GENETICS

Significant advances have been made in the understanding of the detailed structure of proteins in cells, known as DNA (desoxyribonucleic acid), RNA (ribonucleic acid), genes and chromosomes. It behooves all physicians to become well acquainted with these substances which play a vital role in cancer, virus infections, congenital malformations and anomalies and hereditary diseases.

The Rhode Island Hospital is sponsoring a seminar in this field, titled GENETICS. The seminar will be given by outstanding authorities and should furnish practical information useful to the practitioner in the understanding and treatment of the diseases previously enumerated.

PROGRAM

Moderator: ARNO G. MOTULSKY, M.D.

1. HUMAN CYTOGENETICS
   DR. CURT STERN, Department of Zoology, University of California, Berkeley, California
2. GENE STRUCTURE AND GENE FUNCTION WITH SPECIAL REFERENCE TO DNA
   DR. KIMBALL C. ATWOOD, Department of Bacteriology, University of Illinois, Champaign, Illinois
3. GENETIC FACTORS IN HEMATOLOGY
   DR. ARNO G. MOTULSKY, Department of Medicine, University of Washington School of Medicine, Seattle, Washington
4. CLINICAL AND BIOCHEMICAL APPROACHES TO INHERITED DISEASES
   DR. BARTON CHILDS, Department of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland
5. CONGENITAL MALFORMATIONS
   DR. JAMES V. NEEL, Department of Human Genetics, University of Michigan Medical School, Ann Arbor, Michigan

All Physicians are Invited

Date: Saturday, October 21, 1961 *Time:* 9:00 A.M. - 1:00 P.M.
Place: Rhode Island Hospital, Providence, Rhode Island
Admission Fee: $3.00 (free to interns and residents)

IN THE EDITOR'S MAILBOX

TOWN OF NEW SHOREHAM
P. O. BOX D
Block Island, Rhode Island

Dear Doctor:

We are in need of a doctor for general practice in our town on a year round basis. We are an island community of about 500 inhabitants on a yearly basis of population, and approximately 4,000 population during the summer. Therefore a doctor's most busy season would be from June to October. There is no other doctor.

We are located twelve miles from the Rhode Island coast; one hour by daily ferry from the mainland, ten minutes by plane from Westerly, R.I., or twenty-five minutes by plane to Providence, R.I. from a well-maintained State Airport on Block Island.

We have a large house available for residence and office, with some medical equipment. The house is centrally located near a credited school from grades one to twelve.

The Island has four churches, consisting of Roman Catholic, two Baptist and one Methodist. We have a Volunteer Fire Department with a State accredited Rescue Squad, a State Nurse and related equipment for needed assistance.

We do not have a hospital or medical clinic as such on the Island, but we have close contact with adjacent mainland institutions, and immediate transportation available for transfer of patients to hospitals if necessary, by air or boat, in government, commercial or private facilities.

For information on the requirements of a Rhode Island Medical License, please contact Thomas B. Casey, Administrator of Professional Regulations, State Office Building, Providence, R.I.

For further information as to the aspects of our particular need, arrangements if any, and other pertinent data as to personal interview and acquaintance with the Island, please contact Town Clerk, Box D, Block Island, R.I., telephone Howard 6-2409 or Howard 6-2433.

Sincerely,
JOHN F. GRAY
(Member Doctor's Committee)

* * *

July 20, 1961

Dear Dr. Adelson:

I am addressing this letter to you with the hope that you will be able to help us in our effort to recruit physicians for our state institutions.

You are probably aware of the difficulty we are experiencing in recruiting physicians; and our Superintendent of the State Hospital for Mental Diseases, Doctor Sidney S. Goldstein, has made an excellent suggestion which we would like to explore.

We do hear occasionally of local physicians who, for some reason, do not wish to or cannot continue their private activity but who desire to practice on a regular-scheduled week basis. This would appear to be an opportunity to obtain the services of a qualified physician(s) to the advantage of both the physician(s) and patients admitted to state care. An average work week of at least 35 hours may be an excellent solution for a busy private physician who would have reason and a desire to curtail his activity.

I would welcome the opportunity to be helpful to any qualified confrère, and at the same time enhance the quality of medical care being given to our state patients.

Your help in referring physicians who might be interested to us will be greatly appreciated.

Very truly yours,
JOHN J. PELOSI, M.D.
Assistant Director, Curative Services, R.I. Department of Social Welfare

* * *

July 19, 1961

To the Editor:

You have done your readers, and the medical profession in general, a timely service in pointing out the complete disregard of the Senate Subcommittee on Antitrust and Monopoly to the blatant promotion of "useless and even harmful nostrums" in this country. Physicians who are aware of the grave dangers to the profession contained in Forand-type legislation, such as the King-Anderson bill, should also be alerted to Senator Kefauver's new threats to their freedom in prescription-writing and in the use of valuable new drugs. The Kefauver-Celler bills (S. 1552, H.R. 6245) likewise provide for such drastic regulation

of the pharmaceutical industry that research and development of new prescription drugs would be seriously curtailed.

Sincerely,

ROBERT J. BENFORD, M.D.
Director of Medical Relations, Pharmaceutical Manufacturers Association

* * *

HEADQUARTERS BOSTON ARMY BASE
BOSTON 10, MASSACHUSETTS
AMEDS Personnel Procurement Office
17 August 1961

To the Editor:

As a result of the current world situation and the buildup of our nation's defense, many problems have arisen, particularly in reference to physicians and their vulnerability and availability for military service.

With the thought in mind that I might be of service to members of your organization who have either not as yet fulfilled their military service obligation and/or might possibly be interested in the many professional opportunities offered by the Army Medical Service, I would appreciate information concerning my whereabouts being disseminated to the many members of your society.

With kindest regards.

Sincerely yours,
DONALD M. NAY
Capt MSC
AMEDS Personnel Counselor

* * *

DID YOU KNOW?

- That 46.4 million persons were injured in accidents in the U.S. last year, topping the 1959 figure of 43 million persons injured.
- That seven out of every ten workers covered under group health insurance policies issued during 1960 have the right to retain their health insurance protection when they retire.
- That more than 100 guaranteed-for-life health insurance policies and plans now are available to individuals in or near retirement.
- That last year in the U.S. an average of $2.7 million a day was spent on the construction of hospitals, nursing homes and other health care facilities.
- That more than 2.5 million persons now are engaged in work related to maintaining the health of the American people.

KENNEY CLINIC DAY

Wednesday, October 25, 1961

Pawtucket Memorial Hospital

AS CLEAN
AS MODERN
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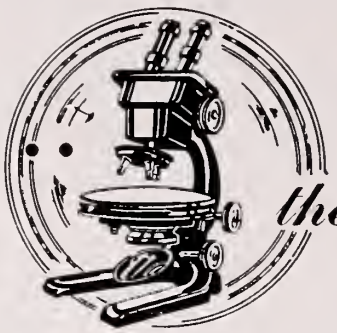
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THROUGH . . .  *the Microscope*

State Aging Administrator's "Glib Generalizations" Refuted

Blue Cross and Physicians Service attacked as "grossly misleading" statements by Mary C. Mulvey, administrator of the State Division on Aging.

The Aging Division head stated that she questioned the adequacy of Blue Cross and Physicians Service coverage provided for the aged by the nonprofit health care plans.

"Doctor Mulvey is certainly entitled to her personal political opinion about government aid for health care of the aged. But to imply that Blue Cross and Physicians Service have not provided adequate protection for such persons is simply not true," Arthur F. Hanley, assistant director of the plans, said.

"The fact is that every person in the state, regardless of age, has been offered the $20 Blue Cross as well as Physicians Service coverage. If these citizens did not subscribe to this particular plan, it is either because they do not choose this protection or they cannot afford it."

"Naturally, Blue Cross and Physicians Service have no power to collect taxes to provide protection automatically, or to provide new money, as it would be done under a government program. But the fact remains that this protection is available on a voluntary basis, and enrollment of the aged in Rhode Island is unmatched anywhere else in the nation."

Mr. Hanley asserted that, as a public service, the plans have voluntarily accepted persons regardless of health conditions or age, and at the same rates as younger people, since 1944. "The job of enrolling our senior citizens on a voluntary basis has been done better than anywhere else in the country — no amount of sniping comments or quibbling over figures can refute this."

"If Doctor Mulvey's concern is whether or not the aged can afford this protection, that is one question. But to assert that Blue Cross does not provide the protection — and use Blue Cross as a scapegoat when it has done the best job of any organization to date for our senior citizens — is certainly a grossly misleading approach to the problem of care of the aged," Mr. Hanley stressed.

"All Blue Cross memberships provide complete coverage of the ancillary services — such as costly drugs and laboratory tests," Mr. Hanley added. "Our purpose in providing coverage with lower daily benefits was that some persons felt they simply could not afford the rates for greater protection. With many people it was either this protection or none — and in order to provide the greatest service to the entire population, we made a variety of memberships available."

The Blue Cross statistical analysis of coverage of the aged, released last year, showed that 93.4 per cent of the eligible self-supporting population were enrolled in Blue Cross. "These statistics were the result of months of study and checking thousands of contracts. For example, over 32,000 group contracts alone were closely analyzed to arrive at the results."

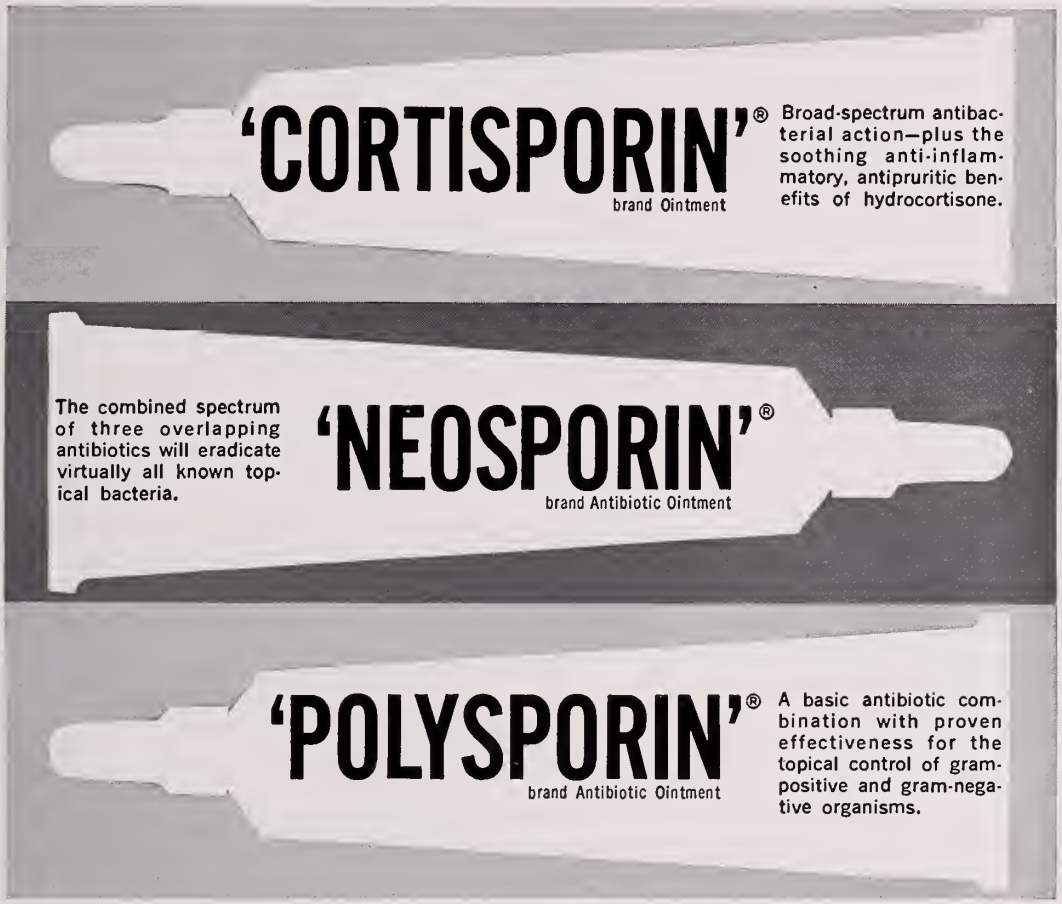
"It is ironic that Doctor Mulvey should imply that Blue Cross may have underestimated the total number of the aged in Rhode Island, since these figures were obtained from her own state agency," Mr. Hanley said. "And although the report was made and released before the recent census, which would account for a slightly lower estimate of the population, these figures would not change the essence of the report to any marked degree."

The plans' official stated that, in making the study, the Blue Cross staff worked closely with the State Division on Aging under Doctor Mulvey's predecessor, Mrs. Roberta Brown. "Many of the statistics were provided by this state agency, as well as the State Department of Social Welfare, and there was no question about these figures when the report was released over a year ago."

"Glib generalizations do not challenge facts. We challenge Doctor Mulvey to show where any plan on a voluntary basis has made greater coverage available or enrolled a greater percentage than Blue Cross and Physicians Service have done here in Rhode Island," Mr. Hanley concluded.

continued on page 540

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THROUGH THE MICROSCOPE

continued from page 538

Hospital Benefits Climbing Rapidly

Benefits paid to persons covered by hospital expense insurance are increasing much more rapidly than the number of persons with such insurance, the Health Insurance Institute reported recently.

From 1959 to 1960, the rate of increase in hospitalization benefits almost quadrupled the growth of persons with hospital insurance, said the Institute, while from 1952 through 1960 the growth rate of benefits more than quadrupled that of persons covered.

The number of persons covered by hospital expense insurance provided by insurance companies, Blue Cross-Blue Shield, and other health care plans rose from 127,896,000 at the end of 1959 to 131,962,000 at the end of 1960, an increase of 3.2 per cent.

At the same time, benefits to pay for the costs of hospital care climbed from $2,889,000,000 in 1959 to $3,250,000,000 in 1960, a boost of 12.5 per cent, and almost quadrupled the rate of increase in coverage.

Full Benefits for Aged Employees

Older workers, regardless of age, may maintain their health insurance coverage in more than 95 per cent of collectively bargained group plans analyzed by the U.S. Social Security Administration.

Restrictive age provisions appear in only a handful of the plans covering millions of active workers. In most of these cases, benefits are reduced rather than discontinued.

The Social Security Administration commented: "... An outstanding characteristic of collectively bargained health and insurance plans (hospitalization, surgical, medical, accident and sickness, life insurance and accidental death and dismemberment) in 1958, 1959, and 1960 was the general absence of provisions barring participation because of the age of the insured worker, whether he was newly hired or long employed."

Hospitalization benefits for *newly hired* older workers were modified in only 14 of 293 plans. Benefit restrictions because of *aging on the job* totaled 10 — one plan discontinuing benefits after age 70 and the others reducing benefits.

In all other plans benefits provided for the older workers were exactly the same as those available to younger employees.

The plans studied ranged in coverage from 1,000 to one-half million workers each, and provided protection to about 40 per cent of the total number of workers under all collectively bargained plans in the 1958-60 period.

Results of M.D. Physicals at A.M.A. Meeting

The American Medical Association announced that physical examinations were given 1,900 physicians during the annual meeting at New York City in June.

Electrocardiograms revealed heart abnormalities in 17.7 per cent of 1,945 physicians, according to Doctor Charles E. McArthur, Olympia, Washington, chairman of the A.M.A. Committee on Annual Physical Examinations for Physicians.

Doctor McArthur said he was impressed with the consistency of the data during the seven years the M.D. physicals have been given at A.M.A. annual meetings. Despite the fact that each year there is a different group of examinees and different consultants, the normal electrocardiograms have been close to 80 per cent each year, he said.

Chest X-rays of 1,900 physicians showed:

— Suspected tuberculosis in 5.3 per cent.
— Other lung abnormalities in 6.1 per cent.
— Cardiovascular abnormalities in 6.7 per cent.
— Other conditions in 6.7 per cent.

Federal Employees Health Program Enrolls 6 Million

The Civil Service Commission estimates that of the 132,000,000 persons in the United States having some form of health benefits protection, almost 6,000,000, or about 4.5 per cent, are participating in the two health benefits programs which it administers. The estimate is based on enrollments in the

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Federal Employees Health Benefits Program as of March 31, 1961, and in the Retired Federal Employees Health Benefits Program as of July 1, 1961.

Each of these is a voluntary, contributory program with the government, as the employer, paying a part of the cost. The Federal Employees Health Benefits Program is available to active employees, to enrolled employees who became annuitants after July 1, 1960, and to the dependents of these two groups. The Retired Federal Employees Health Benefits Program is available to certain persons who were annuitants before July 1, 1960, and to their dependents.

Figures for the program for active federal employees show a total of about 5,397,500 persons covered under that program as of March 31, 1961. This is a gain of 224,000 over the number of persons covered when the program went into effect July 1960. The 224,000 includes 74,000 new enrollees and an estimated 150,000 dependents. The new total coverage breaks down into 1,779,000 employees, 26,000 employee and survivor annuitants who continued their health benefits coverage, and 3,592,500 dependents of employees and annuitants.

The gain in the number of employees enrolled came from (1) new employees; (2) employees who were covered as dependents on June 30, 1960, and who later enrolled under their own right because of a change in family status; and (3) employees who, though eligible, had not enrolled during the original period of enrollment but have since enrolled because of a change in marital status or a move to or from an overseas post of duty.

Eighty-seven per cent of the 74,000 increase in enrollees was reported by the two government-wide plans. Seven of the other larger plans, principally those sponsored by federal employee organizations, accounted for another 10 per cent of the increase in coverage. The other 27 plans accounted for 3 per cent of the total gain in enrollees.

* * *

Former A.M.A. Leader Heads Blood Council

Doctor Gunnar Gundersen of La Crosse, Wisconsin, was elected as president of the Joint Blood Council at its annual meeting in New York June 26. The Council was formed as a nonprofit corporation six years ago to co-ordinate the blood programing and defense collection efforts of the American Medical Association, American Association of Blood Banks, American Hospital Association, American Society of Clinical Pathologists and American Red Cross into a national plan. After presiding at the meeting Doctor Gundersen said, "blood banking organizations have made great progress in providing safe blood to patients during the past several years. The Council is keeping abreast of research and the practical aspects of getting, processing and distributing blood. With the continued support of the Member Institutions, we expect to help solve some difficult problems." Doctor Gundersen is a past president of the American Medical Association.

* * *

Hospital Building at $2.7 Million a Day

Last year in the United States an average of $2.7 million a day was spent on the construction of hospitals, nursing homes and other health facilities, the Health Insurance Institute reported recently.

A total of $978 million was expended on such construction during 1960, the Institute said in its report based on statistics supplied by the U.S. Department of Commerce.

The past five years were a peak period for hospital construction, the Institute said. From 1956 through 1960, expenditures on new construction of hospitals, nursing homes and other health facilities amounted to $4,467,000,000 compared to $3,866,000,000 for the preceding five-year period.

Other government analyses have shown that private sources now provide the major portion of the funds for this construction.

In 1940, total hospital construction expenditures were $87 million, of which $33 million, or 38 per cent of the total, came from private sources, the Institute said. However, in 1960, private construction amounted to $579 million, or 59 per cent of the year's total of $978 million.

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BOOK REVIEWS

A MANUAL OF CUTANEOUS MEDICINE by Donald M. Pillsbury, M.D., Walter B. Shelley, M.D. and Albert M. Kligman, M.D. W. B. Saunders Co., Philadelphia and London, 1961, $9.50

This is an excellent orientation book by three eminent dermatologists. Several items are rather new to the reviewer and, if substantiated by further experience, could be of great significance. For example, the fact that it is possible to predict which hemangioma will involute spontaneously, since there are definite clinical characteristics. It is also interesting to read that one hemangioma is physiologic; also to read about the immigrant melanocyte; that anxiety states are causing darkening of the eyelids; that the patient's views as to the cause of his disorder are to be solicited; and that English terminology should be preferred to the Latin one.

It is courageous to admit that periungual warts are often incurable. Wisely, there is not much discussion of roentgentherapy. This may prevent its use by the inexperienced physician for the treatment of psoriasis, pruritus ani, neurodermatitis, and other non-malignant dermatoses.

The illustrations are highly demonstrative, e.g., the hemangiomata before and after spontaneous involution, the epidermal barriers bypassed by a topically applied medicament, and many others. The unhappy atopic child may leave the reader perplexed as to whether he is atopic because he is unhappy or vice versa.

The text is free of dermatologic rarities, of excessive bibliography and eponyms. It should be a valuable addition to any physician's desk.

F. RONCHESE, M.D.

MEMOIRS OF A MEDICO by E. Martinez Alonso. Doubleday and Co., Garden City, New York, 1961. $4.50

An exciting prologue is a good way to insure further reading. The author, a skilled Spanish surgeon, son of a foreign-service diplomat, outlines his adventurous life from boyhood in Glasgow, to prize fighting in Buenos Aires, and to medical school in Edinburgh.

The Spanish Civil War drags him as a surgeon, involuntarily, to the communist side. The pages are horror-filled. Then comes World War II, commando training, peace, and more surgery in Madrid.

Among the celebrities Doctor Alonso treated was Hilton, who, when the Castellana Hilton was opened in Madrid, wanted him as hotel doctor. The contact with a cosmopolitan tourist population gives occasion to peculiar incidents, like the lining up of tourists in the hotel medical office insisting on a shot of penicillin before going out to a night of revelry.

Interesting are the passages on bull fighters, the episodes that deal with human love for animals, the surgical cases peculiar to countries in which game killed by lead pellets is a steady diet. A girl was wasting away as a case of tuberculous peritonitis when her appendix was found full of such pellets.

Language difficulties make humorous stories. The doctor did not laugh, however, when, rushing to a prospective patient in the early morning, he was told that what he wanted was an "adapter" for his razor.

A very interesting, amusing, well-written book.

F. RONCHESE, M.D.

A SYNOPSIS OF CONTEMPORARY PSYCHIATRY by George A. Ulett, M.D., and D. Wells Goodrich, M.D. The C. V. Mosby Company, St. Louis, 1960. $6.50

A SYNOPSIS OF CONTEMPORARY PSYCHIATRY packs a tremendous amount of information into its 297 pages. The book is divided into three parts.

Part I concerns itself primarily with the various types of examination, neurological, psychiatric, and psychological. It includes a chapter on the psychodynamic concepts of personality which is particularly worth reading for those who have had no training in this field.

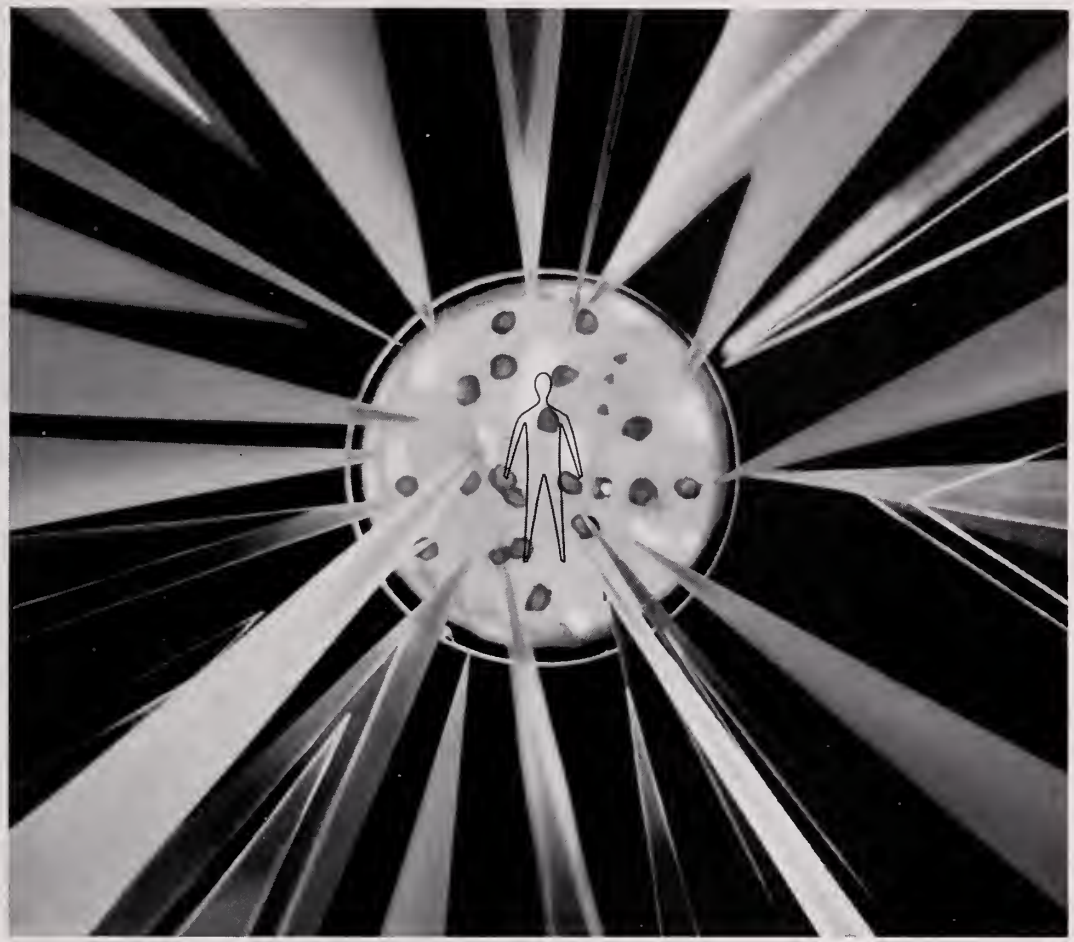
Part II lists and gives some understanding of the organic and functional types of neuropsychiatric disorders.

Part III is concerned with therapeutic measures with an excellent final chapter on the classification of some of the more common tranquilizers, their indications, and side reactions.

At the close of each chapter the authors have lists of suggested reading for those individuals who wish to delve more deeply into this branch of medicine.

It is this reviewer's opinion that this is an excellent book not only for interns and beginning resi-

continued on page 544



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BOOK REVIEWS

continued from page 542

dents in psychiatry but also, because psychiatry reaches into every field of medicine, men in other specialties as well.

DAVID J. FISH, M.D.

HOUSE OF HEALING. The Story of the Hospital by Mary Risley. Doubleday & Co., Inc., Garden City, N.Y., 1961. $4.50

The jacket blurb of the HOUSE OF HEALING states that this is the first complete history of the hospital ever published for the layman. It is indeed strange that it has taken so long for a book to appear, written in nontechnical language, concerning an institution having its sources in antiquity. Because it has been so long in coming, it is a very welcome and certainly worthwhile addition to the medical literature for the lay person.

Medical progress, of marked concern to those outside the profession, can never be measured except as part of the development of houses of healing. Hence the history of hospitals is *ipso facto* of interest to everyone.

The author traces in a highly readable and interesting fashion the history of the hospital from its ancient origins in Sumer, Babylon, and Assyria; and Egypt, Greece, Rome, and Arabia. Thence she covers the period of the Middle Ages — the expansion of nursing and hospital care by the guilds, monastic hospitals and those established during the Crusades. Her story brings us up to the present time. A chapter is devoted to what she considers the three landmarks in hospital history, all founded a thousand or more years ago and all still in operation: the Santo Spirito in Rome, St. Bartholomew's in London, and the Hôtel Dieu in Paris. Nor does she fail to emphasize the importance of the early nursing holy orders and the remarkable contributions of individual nurses such as Florence Nightingale and Elizabeth Fry.

Throughout the book runs a recurring thread of the author's belief that the world's hospitals have developed from man's love of man, his humanitarian impulses, his sense of brotherhood. That is why for so many centuries, she avers, hospitals derived directly from the church. Later came the periods of princely patronage and royal supervision, as well as the beginnings (between the sixteenth and late eighteenth centuries) of what were to form the modern pattern for the support of hospitals: city control and private charity. Modern medicine and hospital construction as we know them today, however, developed only after man's *right* to shelter and healing was recognized.

The author has given the layman, not only a well-documented history of the hospital, but through it, a philosophical footnote on the evolution of man's impulses toward his fellow man.

GERTRUDE N. GOLDOWSKY

MEDICAL ALMANAC 1961-62. Compiled by Peter S. Nagan, A.B., M.A., M.S. W. B. Saunders Co., Phil., 1961. $5.00

How many? Most prevalent? What per cent? Who's president of . . . ? Number of physicians specializing in . . . ? These are the questions that take the time and try the temper of the librarian for a thorough search of every available source may fail to turn up an answer.

MEDICAL ALMANAC is an amazingly successful attempt to solve this problem. Some of the chapter headings show the wide coverage of general information: *Organizations and Officials, Education and Research, Vital Statistics, Medical Manpower, Costs of Illness, Regulations and Schedules,* and even *Historical Facts.*

Librarians and their readers should thank Mr. Nagan and wish him long life and happy hunting in the jungle of statistics!

HELEN M. DEJONG

MEDICAL RESEARCH AND THE DEATH PENALTY. A Dialogue by Jack Kevorkian, M.D. Vantage Press, N.Y., 1960. $2.50

A criminal condemned to death, says this book, should have a choice of death by anesthesia and medical experimentation. The ordinary death penalty as prescribed by the state, would be the alternative. This idea originated from the author's study of ancient Greece while writing a history of the autopsy. Every schoolboy knows that Socrates drank hemlock; this was by choice, apparently. Human vivisection of the condemned in Greece is alluded to in the book which is dedicated "To the Hellenists of ancient Alexandria who evidently dared to do that which we scarcely dare ponder."

A series of dialogues between the Protagonist (Dr. Kevorkian) and, successively, the Condemned, the Law, the Physician, and the Public presents the arguments for the plan. Seventy-two pages say this. (1) A man must die. (2) We should help him by killing him painlessly. (3) By lethal experiments medical knowledge will increase. (4) Society will be healthier and happier.

A patient's permission freely given is historically, traditionally, morally and legally the basis for medical practice. The duress of the death penalty itself makes a freely given permission impossible and herein negates all subsequent arguments and developments in the book. The Physician would be a willing, silent partner of a political state in its executions. Medical tradition has generally transcended the political concepts of temporal states. It will be

wise to continue.

The duress of impending death due to disease is a different matter. Permission for experimentation is generally acceptable to the profession. If there is real virtue in terminal anesthetic deaths they might be considered for this category. But this is not the subject of the book reviewed and no more need be said. The difference in such permission for the profession should be clear.

This is an unusual book on an unusual subject. It will provoke thought about several unusual ethical problems in medicine. Such a book is worth writing and worth reading.

ROBERT V. LEWIS, M.D.

REGULATION OF THE INORGANIC ION CONTENT OF CELLS. Ciba Foundation Study Group No. 5. In Honour of Prof. E. J. Conway. Editors: G. E. W. Wolstenholme and Cecilia M. O'Connor. Little, Brown & Co., Bost., 1960. $2.50

The collected papers and discussion of the 5th Study Group supported by Ciba Limited are published in this booklet of 93 pages. The subject, REGULATION OF THE INORGANIC ION CONTENT OF CELLS, was discussed by the leaders of the field in a one-day conference.

The limited subject and highly technical presentation emphasize the basic importance of inorganic ions of cells in medicine and physiology. The clinical use of all I-V fluids, the increasing importance of the trace ions diagnostically and therapeutically and the recognition of the importance of intra- rather than extra-cellular concentration emphasize the need for advances in and promotion of the study of the regulation of the cellular concentration.

The material is technical and I could find no direct clinical applications. However, the ultimate applications are unlimited and this digest of current thought on the subject is available for those in whose interest and concern the booklet has been published.

ROBERT V. LEWIS, M.D.

BLOOD DISEASES OF INFANCY AND CHILDHOOD by Carl H. Smith, M.D. The C. V. Mosby Co., St. Louis, 1960. $17.00

This new book by Doctor Carl H. Smith is a well-written review of hematology with special emphasis on its pediatric application.

Although the field of hematology is not sharply divisible in terms of age groups, we welcome this book because we hope that it will be an incentive for physicians dealing with pediatric problems to refresh their knowledge on the most recent advances of hematology. As a matter of fact, we would like

concluded on next page



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to see more books of this type tailored to suit the need of other specialties as well.

Presently, hematology has reached a high degree of perfection and deserves the right to be considered as a specialty. However, since in many diseases, there are changes in the peripheral blood and blood forming organs, we can certainly say that in broad terms hematology involves practically every field of medicine. Every practicing physician, at one time or another, is faced with some hematology problem and should be able to evaluate each case, make the diagnosis and give the patient the correct treatment. No physician, nowadays, would consider treating a patient with diabetes in a hospital or clinic which could not offer facilities for chemical determination of blood and urine sugar. Yet, severe anemias, bleeding conditions, and other hematological disorders are often treated with shotgun medication, many times without even trying to establish a tentative diagnosis. The laboratory hematology is as indispensable as the E.K.G. in cardiology or X-ray in gastro-enterology; however, if most internists know exactly what they want when they request an E.K.G., the same is not always true when the same physician is faced with a hemorrhagic condition or severe anemia.

Doctor Smith's text is very accurate and up to date and the chapters on maternal fetal interrelation in blood dyscrasia, exchange transfusion, erythroblastosis fetalis and hereditary hemoglobinopathies are extremely clear, concise, and thoroughly explained. The description of an exchanged transfusion is the best I have ever read. The chapters on childhood leukemia and hemorrhagic disorders are also excellent.

The illustrations in black and white are only fair, but we do not consider this a major defect; we subscribe to Ian Aird's opinion "there is no doubt that the commonest type of memory is that which relies on visual impressions, yet too close a dependence on visual memory enchains the intellect; the highest faculty of the intellect and the finest communication is language."

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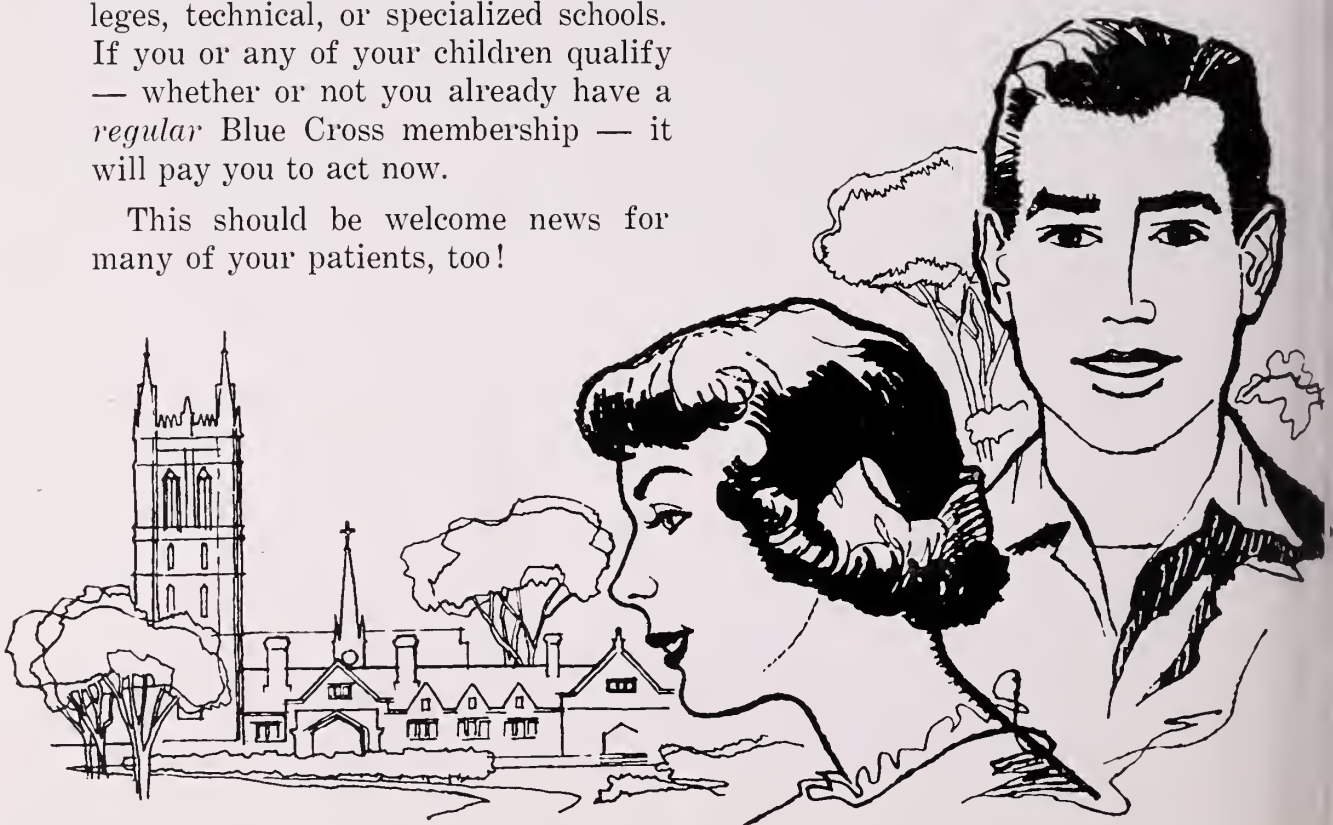
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Volume XLIV, No. 10

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Efficacy of propionyl erythromycin and its lauryl sulfate salt in 803 patients with common bacterial respiratory infections

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Acute Streptococcus Pharyngitis*
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CHLOROMYCETIN effectively penetrates the blood-brain barrier;[3-6] provides effectiv action against *H. influenzae*[1-4 7-9] and other invaders of the meninges.[5,7,10,11] Produc forms are available for administration by the intravenous, intramuscular, and ora routes. For these reasons, CHLOROMYCETIN has contributed conspicuously to th dramatic drop in mortality rates in meningeal infections caused by *H. influenzae* and other susceptible microorganisms.

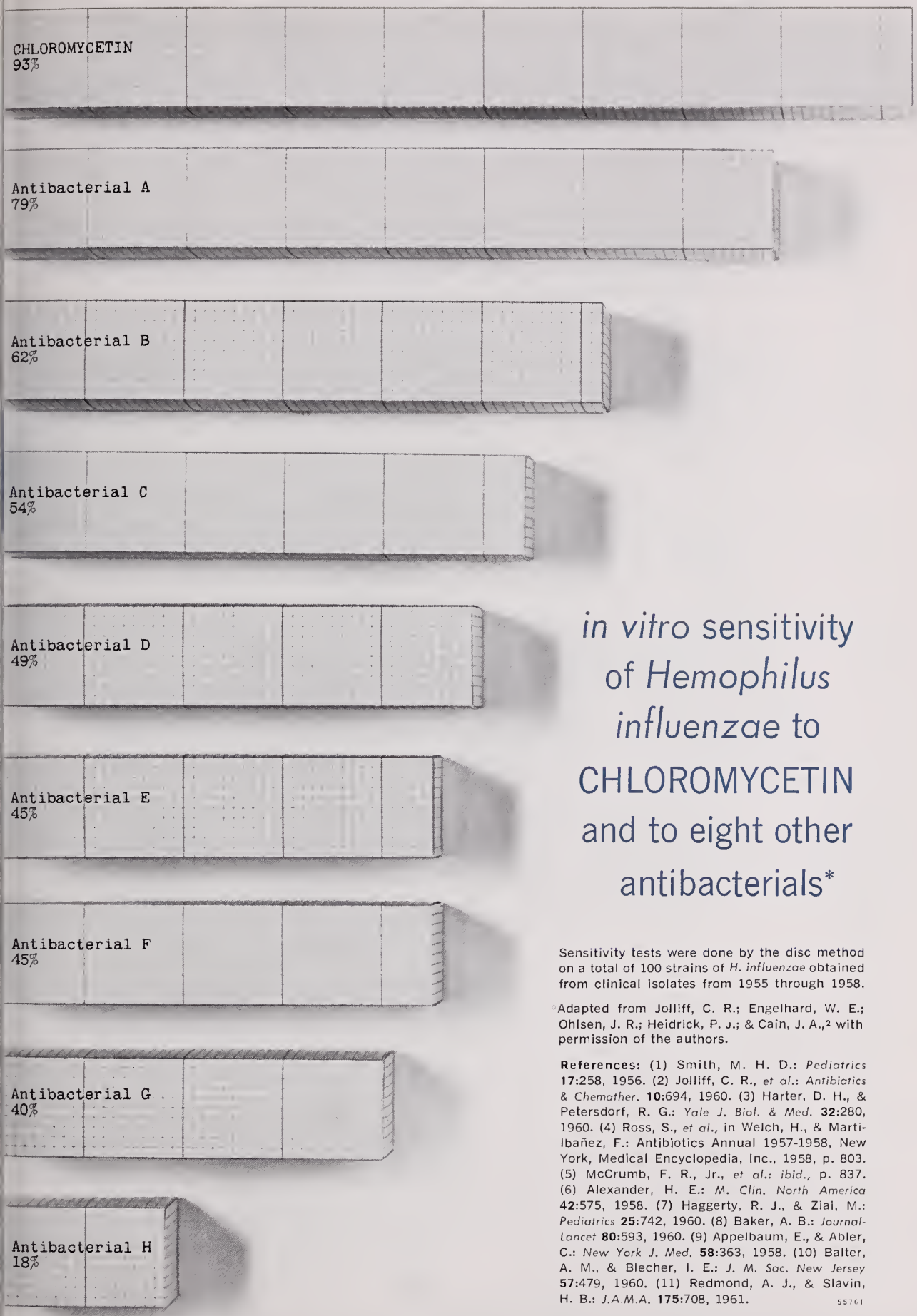
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*Adapted from Jolliff, C. R.; Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J.; & Cain, J. A.,[2] with permission of the authors.

References: (1) Smith, M. H. D.: *Pediatrics* **17**:258, 1956. (2) Jolliff, C. R., *et al.*: *Antibiotics & Chemother.* **10**:694, 1960. (3) Harter, D. H., & Petersdorf, R. G.: *Yale J. Biol. & Med.* **32**:280, 1960. (4) Ross, S., *et al.*, in Welch, H., & Marti-Ibañez, F.: Antibiotics Annual 1957-1958, New York, Medical Encyclopedia, Inc., 1958, p. 803. (5) McCrumb, F. R., Jr., *et al.*: *ibid.*, p. 837. (6) Alexander, H. E.: *M. Clin. North America* **42**:575, 1958. (7) Haggerty, R. J., & Ziai, M.: *Pediatrics* **25**:742, 1960. (8) Baker, A. B.: *Journal-Lancet* **80**:593, 1960. (9) Appelbaum, E., & Abler, C.: *New York J. Med.* **58**:363, 1958. (10) Balter, A. M., & Blecher, I. E.: *J. M. Soc. New Jersey* **57**:479, 1960. (11) Redmond, A. J., & Slavin, H. B.: *J.A.M.A.* **175**:708, 1961.

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BRIEFS

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PROFESSIONAL RELATIONS SEMINAR A TIMELY SUCCESS:

Over 300 physicians and representatives of Blue Shield Plans attended the Professional Relations Seminar held at the Colony Motor Hotel on September 22nd and 23rd. This second annual seminar, sponsored by the New England Blue Shield Plans, featured speakers who are recognized authorities in the medical profession, government, and labor.

Between speeches, a doctor was overheard commenting, "You know, I was mad as the devil at some of the things he (the speaker) said. But after reflecting on them for a minute, I realized he was right."

Here are a few excerpts from the speeches:

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"And I suggest to the members of the medical profession, and to those who are engaged in related activities in the Blue Shield Plans, that if these problems (facing the profession) are not met with imagination, with thought, with vigor, solutions will be drawn for you—in some instances by those least qualified to make them. The problem must not be left to a default determination."

The Hon. JOSEPH R. WEISBERGER, Assoc. Justice of the Superior Court of Rhode Island

NOTE! *If you would like copies of the speeches that were presented at the seminar, please call the Blue Cross-Physicians Service Public Relations Department.*

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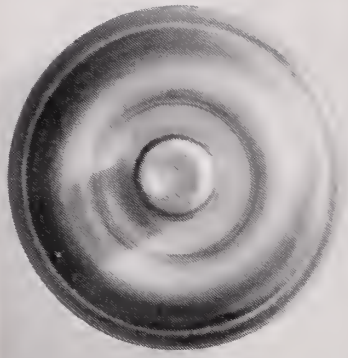
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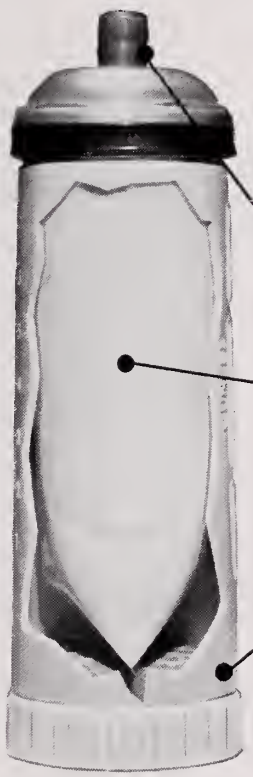
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*Pomeranze, J.: J. New York M. Coll. *1*:32, 1959.

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THE WASHINGTON SCENE

A Summary Prepared by the Washington Office of the American Medical Association

THE SENATE AND HOUSE approved a multi-million-dollar expansion of federal aid to community health services.

The Senate approved it by routine voice vote a few weeks before adjournment. The House earlier had approved a slightly different form of the legislation. No difficulty was anticipated in adjusting the differences of the two versions so that it could become effective at an early date.

Some of the programs covered by the legislation were of special importance to the aged and the chronically ill. Key provisions of the bill would:

— Raise from 30 to 50 million dollars, for five years the annual authorization for matching grants to states and cities for public health services such as home nursing, home health care and a variety of services to nursing homes.

— Establish a five-year 10 million-dollar-a-year program of special grants to nonprofit groups for research and development aimed at improved health services given outside the hospital.

— Raise from 10 million to 20 million dollars the annual authorization for construction of public and nonprofit nursing homes.

— Extend loan provisions for hospital construction under the Hill-Burton Act until its grant program expires in June 1964.

— Raise from 1.2 million to 10 million dollars the annual ceiling on grants for hospital research and permit grants for experimental or demonstration hospital units.

— Extend for three years the matching grant program which provides federal help for construction of health research facilities and authorize 50 million dollars rather than 30 million dollars a year.

Influenza Epidemic Predicted

Doctor Luther L. Terry, Surgeon General of the U.S. Public Health Service, predicted that there will be a new influenza epidemic in the United States this fall and winter.

He urged immediate vaccinations for people over 65, pregnant women and persons with heart diseases and other chronic illnesses.

"We are probably due for some Asian flu outbreaks, since they come in two- or three-year cycles," Terry said, "and we are overdue for type B flu outbreaks which come in four- to six-year cycles."

More than 86,000 people in the three most susceptible groups died from influenza between September 1957 and March 1960. Asian flu has been dormant in this country since then. It has been more than six years since type B flu has been widespread.

Both types of flu were prevalent in other countries in 1960-61, especially in England. In 1951, when England had a similar epidemic, flu reached this country the following year, Terry noted.

The U.S. Public Health Service is alerting physicians, state health officers and welfare agencies to include flu shots in their programs of public assistance.

Live Virus Polio Vaccine Licensed

The Type I oral, live virus polio vaccine developed by Doctor Albert Sabin has been licensed by the U.S. Public Health Service for marketing in the United States.

However, the PHS, the American Medical Association and others urged that the widest possible use still be made of the Salk killed vaccine. The principal use of the newly licensed oral vaccine this year will be against epidemic threats of Type I polio.

The license for manufacture of the oral vaccine was granted to Pfizer, Ltd., Sandwich, England, and it is being marketed in this country by Chas. Pfizer & Co., Inc., of New York.

Doctor Luther L. Terry, surgeon general of the PHS, said he expected Type II oral vaccine to be licensed soon but that it would be several months before Type III would be licensed.

Pfizer is expected to have more than 50 million doses of the Type I oral vaccine available for use by next spring at the start of the 1962 polio season. For an epidemic reserve, the PHS ordered at the time of the licensing a total of 900,000 doses of the Type I vaccine in frozen form at a cost of $81,000.

Information on the terms for obtaining vaccine from this epidemic reserve was sent to state and territorial health officers. The requirements include:

At least three cases of Type I polio in the community within a month, of which two have been confirmed to be Type I by laboratory analysis.

Adequate community organization and medical leadership to insure rapid and complete coverage of the population under 50.

Agreement to make the vaccine available without charge to persons under 50.

All local requests must be channeled through state health departments.

Of the three types of polio virus, Type I has been responsible in recent years for between 60 and 70 per cent of all paralytic polio in this country, PHS said. However, a sampling of virus isolated from paralytic cases this year suggests that Type III may be increasing in relative importance as a cause of paralytic disease.

Doctor Terry attributed "the progressive decline in polio since 1955" to the Salk vaccine. He said that through Aug. 5 only 234 paralytic cases had been reported this year, as compared "with 13,850 for the polio season of 1955, the first year in which the Salk vaccine became available in limited quantities."

The A.M.A. said the licensing of the live virus vaccine marked "another step forward" in the fight against polio. The Association predicted the new vaccine would be "a valuable weapon against epidemics of Type I polio." However, the A.M.A. again urged that everyone complete a series of Salk shots.

"Until such time as oral vaccines against all three types are available, the Salk vaccine remains the only protection available against all types of paralytic polio," the A.M.A. said.

Legislative Roundup

Community Health Bill . . . Conferees reached agreement September 18 on the Community Health Services and Facilities Act (H.R. 4998) which steps up federal grants to help meet the medical costs of the aged and chronically ill. . . . The House adopted the conference report on September 20, thus clearing it for the President's signature. . . . The compromise measure authorized approximately 420 million dollars in outlays over the next five years. . . . The bill only authorizes expenditures. . . . Actual cash must be put up in a separate appropriations bill. . . .Main provisions of the bill include the following: (a) increases from 30 to 50 million dollars for a five-year period the authorization for grants to states for public health services; (b) provides 10 million dollars for five years beginning in July, 1962, for grants to make studies for improving methods of providing health services for the aged outside hospitals; (c) increases the authorization for appropriations for nonprofit nursing homes under the Hill-Burton program from 10 to 20 million dollars; (d) broadens the surgeon general's authority to conduct research in the development and utilization of hospitals and other medical facilities, boosting grants for this purpose from 1.2 million to 10 million dollars; (e) increases the matching grant program for construction and equipping of health research facilities from 30 to 50 million dollars for the current fiscal year; (f) increases the grants for the construction of health facilities to two thirds of the cost or even larger if there are unusual circumstances; and (g) extends the Hill-Burton loan program until July 1, 1964, the date the Hill-Burton grant program expires.

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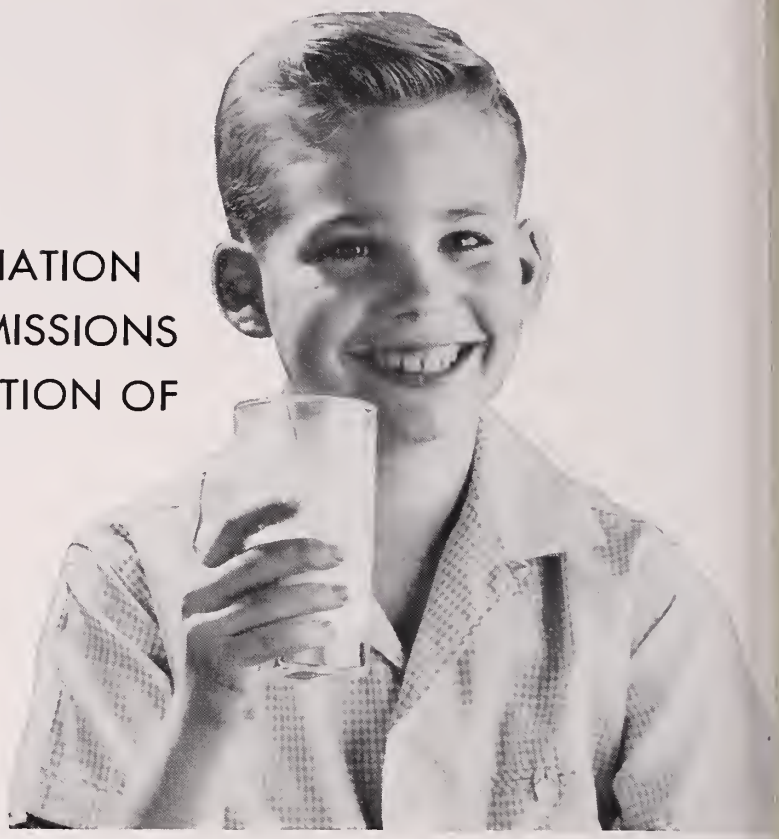
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3. AUTOMATIC MILKING. Cows are milked automatically by electric machine. Milk is bottled without exposure to air or human touch.

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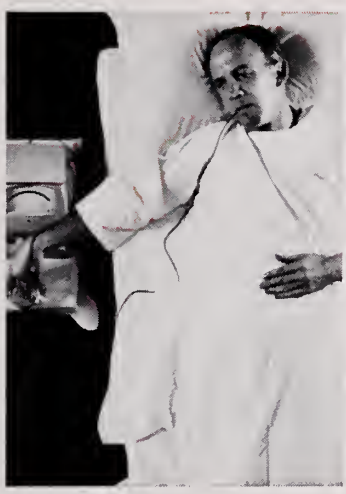
Consult literature and dosage information, available on request, before prescribing.

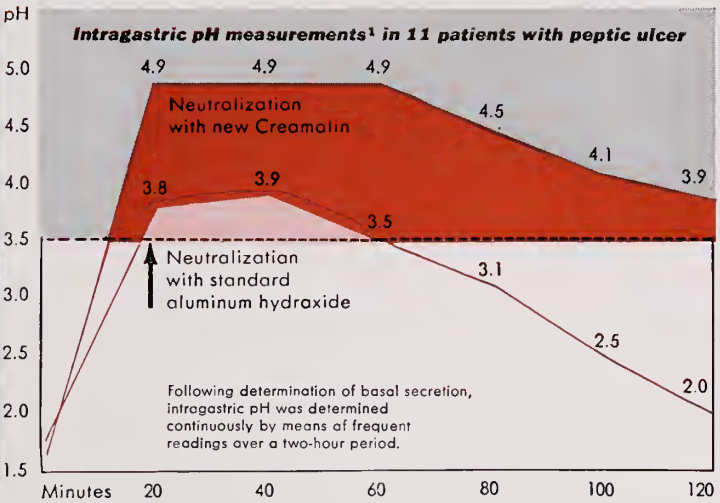
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How Supplied: Creamalin Tablets, bottles of 50, 100, 200 and 1000. Also available: New Creamalin Liquid (1 teaspoon=1 tablet), bottles of 8 and 16 fl. oz.

References: **1.** Schwartz, I. R.: *Current Therap. Res.* 3:29, Feb., 1961. **2.** Beekman, S. M.: *J. Am. Pharm. A.* (Scient. Ed.) 49:191, April, 1960. **3.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:381, July, 1959. **4.** Data in the files of the Department of Medical Research, Winthrop Laboratories. **5.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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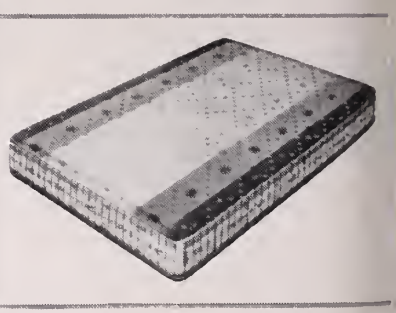
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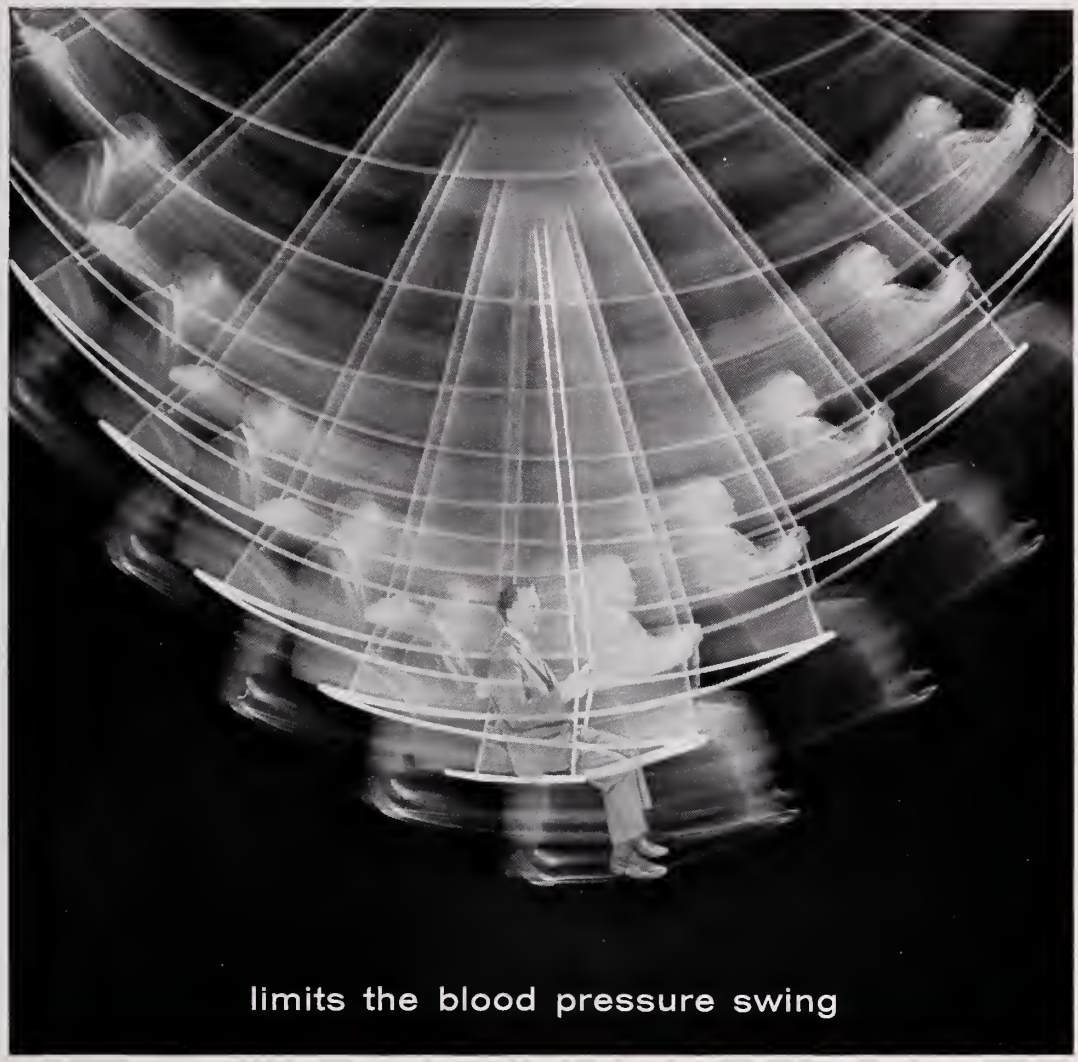
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Rautrax-N offers all the advantages of Raudixin, Naturetin and potassium chloride in a single dosage form *plus: increased efficacy* – Combined action of Raudixin and Naturetin results in a potentiated antihypertensive effect greater than that produced by either drug alone. *increased safety* – Potentiated action permits lower dose of other antihypertensive agents, thus reducing severity of side effects. Protection against possible potassium depletion. *flexibility* – Interchangeable with either Raudixin or Naturetin & K. *economy* – Maintenance dosage of only 1 or 2 tablets daily for most patients. *convenience* – Once-a-day maintenance dosage. Two potencies available.

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IN THE EDITOR'S MAILBOX

AMERICAN MEDICAL ASSOCIATION
Chicago 10, Illinois

To the Editor:

During the Annual Meeting this year, the A.M.A. House of Delegates approved a plan to co-operate in the recruitment of volunteer physicians for emergency service in the foreign mission field.

The Department of International Health is seeking the names of physicians who will volunteer to serve in the mission field on a temporary basis. We are receiving the co-operation of agencies representing every religious denomination in the U.S. which sponsors medical missionaries.

Each physician who volunteers will be asked to complete an application form. This information will be used by the missionary agencies in considering the qualifications of the applicant. The final choice as to the acceptability of each volunteer physician rests with the screening committees of the missionary agency.

We shall appreciate your co-operation in informing the members of your society about this new A.M.A. program. Physicians who are interested should write directly to the Department of International Health. Attached is a proposed article which we are submitting to you for publication in your journal. (See below)

If we can provide any additional information, please do not hesitate to let us know.

Sincerely yours,
F. J. L. Blasingame, M.D.
Executive Vice President

Doctor Diplomats

Five physicians from Tulsa, Oklahoma, members of the First Presbyterian Church of Tulsa, are giving up their practices for six-week periods to serve voluntarily at the Miraj Medical Center in Maraj, India.

Doctor C. S. Lewis, one of these five Tulsa physicians, recently reported to the A.M.A. on the progress of the project labeled *Doctors in Asia.*

The first of the group of volunteer physicians flew to Miraj in mid-August. He will return at the end of September and the next doctor will make the trip. In all, the five physicians will donate a total of thirty weeks to the program. The project is endorsed by the Tulsa County Medical Society. Funds for medical equipment, transportation and other expenses were raised through church and public contributions.

Other groups of American physicians are also becoming interested in the possibility of initiating a similar venture in their own communities. For example, several doctors met with Doctor Lewis during his A.M.A. visit to discuss the feasibility of adopting an overseas program which would provide medical care to another area of the world equally in need of such assistance.

Still another example of American physicians demonstrating their interest and willingness to serve in foreign mission fields on a temporary basis is shown by the large number of doctors who have written to the A.M.A. Department of International Health in the last few months to inquire about such service. This new Department administers a program approved last June by the A.M.A. House of Delegates whereby members of the A.M.A. may volunteer for service in the foreign mission fields on a temporary basis when emergencies arise. Co-operating with A.M.A. in this program are missionary agencies representing every denomination sponsoring American medical missionaries.

Physicians interested in volunteering for such service are asked to write directly to the A.M.A. Department of International Health, 535 N. Dearborn Street, Chicago 10, Illinois.

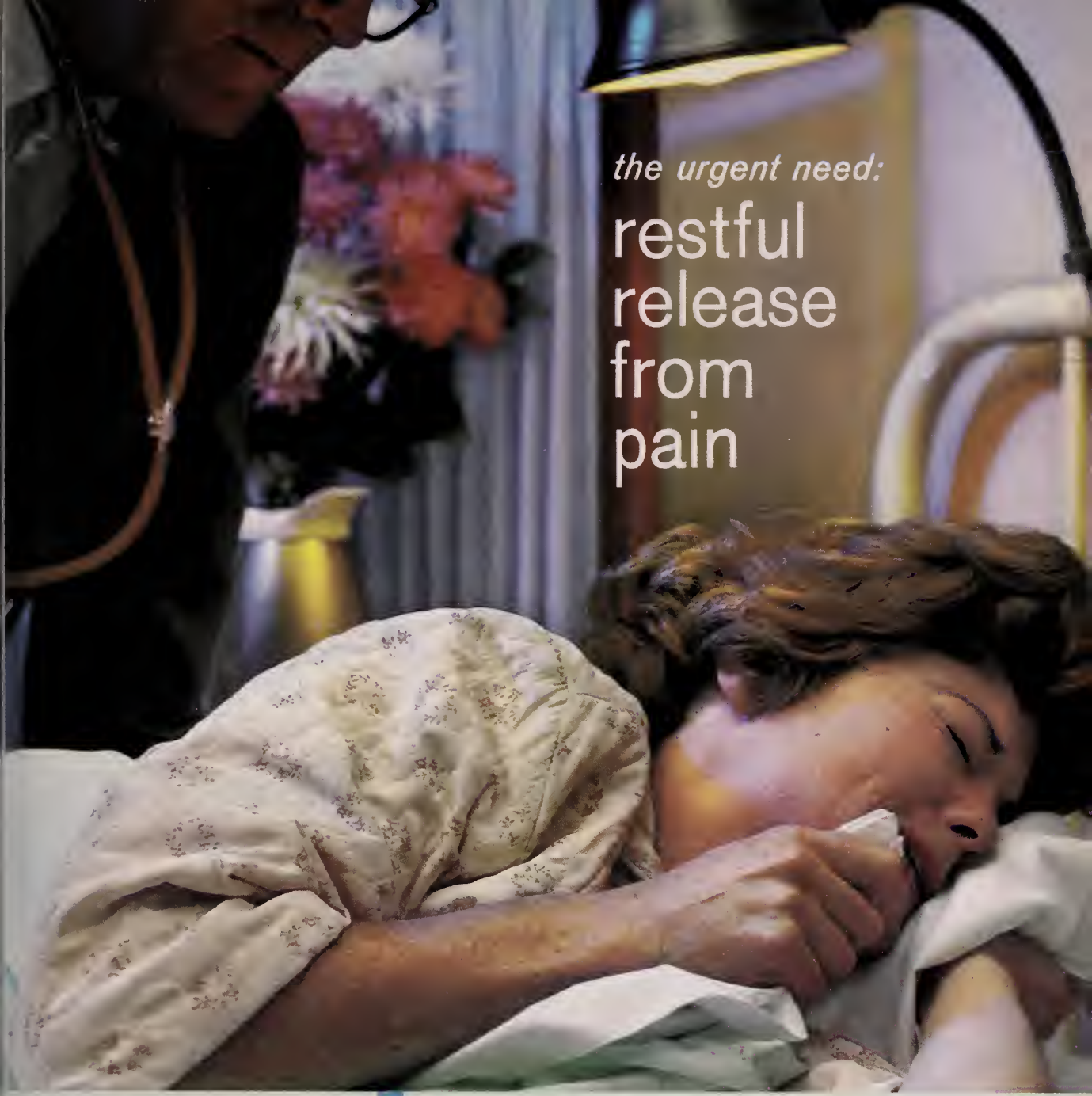
PHARMACEUTICAL MANUFACTURERS ASSOCIATION
1411 K Street, N.W., Washington 5, D.C.
September 18, 1961

To the Editor:

The Problem of Comparative Efficacy, an excellent analysis of one of the most objectionable aspects of the Kefauver-Celler bill, which you published in August, provided a valuable and timely service to your many readers.

Physicians everywhere should be alerted to the fall-out of this bill, if enacted, on the entire medical profession and should realize it would have a far reaching effect on all practitioners. The harassment of the pharmaceutical industry by reduced patent protection, government-named products and continual plant inspections is of secondary importance. The physician's right to prescribe the drugs he needs in the manner he prefers is part of the freedom of American medicine, and must be preserved.

Sincerely,
Robert J. Benford, M.D.
Director of Medical Relations



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PHENAPHEN with Codeine ..... ¼ gr.

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To each "according to his need" — maximum safe analgesia through time-and-pain-tested synergistic formulations, in four strengths for individualized prescription.

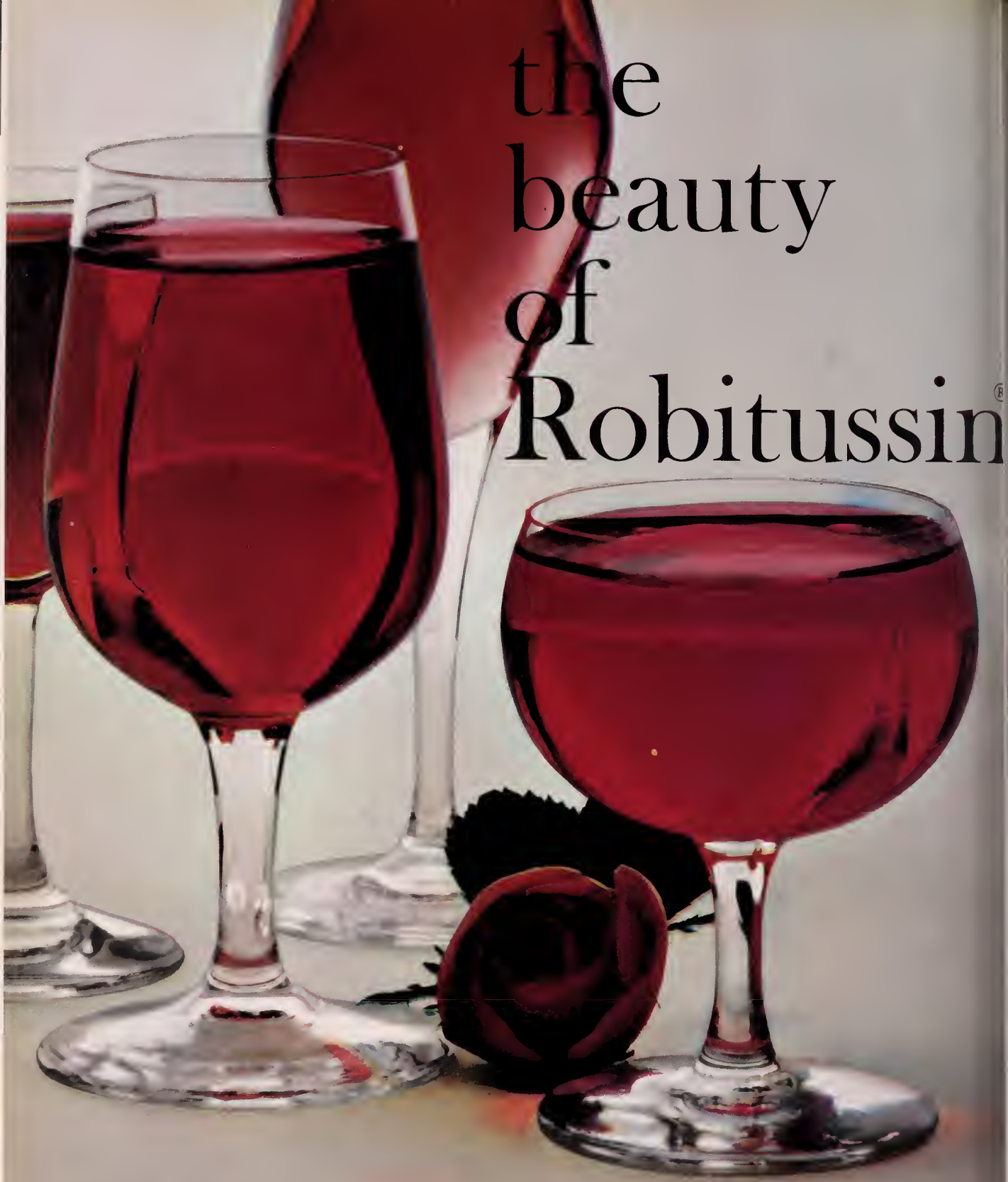
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PHARMACEUTICAL RESEARCH 1878

CONFERENCE ON PREVENTION OF DISABILITY

Auditorium, George Building, Rhode Island Hospital

Wednesday, November 29 and Thursday, November 30, 1961

The Conference is Open to All Rhode Island Physicians

WEDNESDAY, NOVEMBER 29, 1961

9:00-9:30 A.M.	REGISTRATION
9:30 A.M.	GREETINGS, Oliver G. Pratt, *Director,* Rhode Island Hospital
	OBJECTIVES AND PLAN OF CONFERENCE, Thomas Perry, Jr., M.D., *Chairman,* Chronic Illness Committee, R. I. Council of Community Services, Inc.
9:45 A.M.	THE CHALLENGE OF DISABILITY, Bernard D. Daitz, PH.D., *Consultant,* Restorative Services, Chronic Disease Program, Public Health Service
10:15 A.M.	THE ROLE OF THE PHYSICIAN IN THE PREVENTION OF DISABILITY, Luther Terry, M.D., *Surgeon General,* Public Health Service
10:45 A.M.	COFFEE BREAK
11:15 A.M.	PRINCIPAL DISEASE ENTITIES THAT CAN RESULT IN DISABILITY, Joseph Dwinelle, M.D., *Director,* Physical Medicine, Rhode Island Hospital
11:45-12:45 P.M.	MUSCULOSKELETAL SYSTEM,* O. D. Cinquegrana, M.D., *Moderator;* Seebert J. Goldowsky, M.D.; Kenneth G. Burton, M.D., and Henry M. Tyszkowski, M.D.
1:00 P.M.	LUNCHEON
2:15-3:15 P.M.	NERVOUS SYSTEM,* Herman Kabat, M.D., *Moderator;* David J. Fish, M.D.; Abraham Saltzman, M.D., and Nathan Chaset, M.D.
3:15-3:45 P.M.	COFFEE BREAK
3:45-4:45 P.M.	CARDIOVASCULAR SYSTEM,* Henry Miller, M.D., *Moderator;* Frank B. Cutts, M.D.; Seebert J. Goldowsky, M.D., and K. W. Hennessey, M.D.
4:45-5:00 P.M.	SUMMARY, Joseph Dwinelle, M.D.
5:45 P.M.	SOCIAL HOUR (Dutch treat), Johnson's Hummocks
6:30 P.M.	DINNER
	REHABILITATION OF THE DISABLED, Frank H. Krusen, M.D., *President,* Sister Elizabeth Kenny Foundation, Minneapolis, Minnesota
	THE IMPORTANCE OF PREVENTION OF DISABILITY, Congressman John E. Fogarty

THURSDAY, NOVEMBER 30, 1961

9:30-10:00 A.M.	SUMMARY OF PREVIOUS DAY'S DISCUSSIONS, Leslie Knott, M.D., *Director,* Chronic Disease Program, Public Health Service
10:00-12:45 A.M.	GROUP DISCUSSIONS of 10 or 12 people, with a moderator and one or more resource people in each group
11:00-11:30 A.M.	COFFEE BREAK

Subjects to be Discussed by All Groups

1. How can the general practitioner be involved as a key person in the prevention of disability?
2. How can leadership be provided in each state to make prevention of disability possible through the various resources?
3. How can community resources be involved and identified? How can physicians be helped to find resources in their local communities?
4. What is the role of official and voluntary health agencies?
5. Is paying for such services a problem? If so, what recourse do we have to such agencies as Blue Cross and Blue Shield?

1:00 P.M.	LUNCHEON
2:00-3:00 P.M.	GROUP REPORTS
3:00-3:30 P.M.	CONFERENCE SUMMARY, Joseph E. Cannon, M.D., M.P.H., *Director,* Rhode Island State Department of Health

*In each of the three systems being considered, two or three cases will be presented, taking ten minutes each, followed by a reaction panel consisting of a physiatrist, a general practitioner, and a specialist in the particular system.



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...or, to be exact, a total of 2,106 ounces in his first two years. And how much he'll need during his first twenty years would have to be measured by the truckload, because the need for the nutrients contained in Florida orange juice continues throughout life.

How our little "limey" or any of your other patients obtain the vitamins and nutrients found in citrus fruits is important to them and to you. There are so many wrong ways, so many substitutes and imitations for the real thing.

For a way that combines real nutrition with real pleasure, there's nothing better than the oranges and grapefruit ripened under Florida's own sunshine. Somehow, nothing can surpass the result of the combination of sun, air, temperature, and soil found in Florida.

It's good nutrition to encourage people to drink orange juice. It's even more judicious to encourage them to drink the juices and eat the fruits watched over by the Florida Citrus Commission. These men set the world's highest standards of quality in fresh, frozen, canned, or cartoned citrus fruits and juices.

When you suggest to your patients that they have a big glass of orange juice for breakfast, or for a snack, or when they want to raid the refrigerator, the deliciousness of Florida orange juice will give you assurance that they'll *want* to carry out your recommendation. You'll be helping them to the finest drink there is—by the glassful or the barrel.

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cuts healing time in urologic conditions

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1. Billow, B.W.; Cabodeville, A. M.; Stern, A.; Palm, A.; Robinson, M., and Paley, S. S.: Southwestern Med. *41*:286, 1960. 2. Clinical Reports to the Medical Department, Armour Pharmaceutical Company, 1960.

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(BRAND OF PROPANTHELINE BROMIDE)

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The prolonged action of new PRO-BANTHĪNE P.A. is regulated by simple physical solubility. Each PRO-BANTHĪNE P.A. tablet releases about half of its 30 mg. promptly to establish the usual therapeutic dosage level. The remainder is released at a rate designed to compensate for the metabolic inactivation of earlier increments.

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New PRO-BANTHĪNE P.A. will be of particular benefit in controlling acid secretion, pain and discomfort both day and night in ulcer patients and in inhibiting excess acidity and motility in patients with peptic ulcer, gastritis, pylorospasm, biliary dyskinesia and functional gastrointestinal disorders.

Suggested Adult Dosage: One tablet at bedtime and one in the morning, supplemented, if necessary, by additional tablets of PRO-BANTHĪNE P.A. or standard PRO-BANTHĪNE to meet individual requirements.

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CHICAGO 80, ILLINOIS
Research in the Service of Medicine

The RHODE ISLAND MEDICAL JOURNAL

VOL. XLIV OCTOBER, 1961 NO. 10

A SURGEON LOOKS AT CANCER*

JULIAN JOHNSON, M.D.

The Author. *Julian Johnson, M.D., Professor of Surgery, School of Medicine, the University of Pennsylvania, Philadelphia, Pennsylvania.*

As we as surgeons grow older it is perhaps natural that we stop and ask ourselves where we stand on the problem of cancer. The optimistic surgeon is apt to think of the patients in whom he has obtained a "cure" as a result of his extirpation of the tumor. The pessimistic surgeon is apt to think of the failures where he has done what he felt to be a good operation and yet the patient has gone on to die of widespread malignancy. The optimistic surgeon may say — look at the patient with cancer of the left colon; if he will come to me before it has spread into the lymph nodes, I can get a 75 per cent cure or better. He says — look at the patient with cancer of the stomach; if he will come to me when the cancer is confined to the stomach, I can get a 50 per cent cure or better. He says — look at the patient with cancer of the lung; if he will come to me when his tumor is no more than one or two centimeters in diameter, I can get a 75 per cent cure. The thoughtful surgeon must admit, however, that once the cancer has spread beyond the organ in which it originated, it may be extraordinarily difficult or impossible to remove it completely.

The advances made in the surgical technics, as well as in the improved knowledge in pathology and physiology, in the last 100 years have spurred the surgeon on to Herculean efforts to remove malignant tumors. The discovery of the principle of aseptic technic, the introduction of anesthesia and the pain relieving drugs, the understanding of the basis of surgical shock and the existence today of the modern blood bank — these and many other developments have made it possible for the surgeon to remove major portions of a patient's viscera in an effort to remove a malignant tumor. It is now possible to remove a lung, most of the esophagus, the entire stomach, all of the large bowel, and large parts of the small bowel. It is common practice to remove a kidney and, not infrequently, the bladder. One or more lobes of the liver may be removed for primary or metastatic disease. A radical neck dissection, often bilateral, or a radical groin dissection is being done prophylactically. And, indeed, in some extensive tumors subtotal evisceration is being carried out. It cannot be denied that an occasional patient's life is prolonged by these massive surgical feats, but the thoughtful surgeon knows that the problem of cancer will never be solved in this fashion since, by and large, if the patient is to be cured of his disease, he must present himself to the surgeon before the tumor has spread beyond the viscera in which it arose.

Let us consider cancer of the breast. Radical mastectomy, the present standard operation for cancer of the breast, was introduced by Halsted at about the turn of the century and has changed very little in the last sixty years. It has been recognized that when the mass is situated in the medial part of the breast close to the midline the lymphatic spread is apt to be to the mediastinal nodes rather than to the axilla, so that the removal of these nodes has been advocated by some. A few years ago Wangensteen advocated section of the clavicle and radical neck dissection along with a radical mastectomy and axillary dissection — an operation referred to as "super-radical mastectomy." We have heard no more about this operation in recent years, so that I can only assume that it did not materially improve the end result. Haagensen, on the other hand, has gone to the other extreme and will perform a radical mastectomy only when the most rigid criteria have been met.

Recently, McWirter and his group in Edinburgh have contended that simple mastectomy, plus X-ray therapy, gives end results superior to those obtained by radical mastectomy. Unfortunately, the protocol set up in Edinburgh was not sufficiently strict to be conclusive. The fact is that as of now we cannot say conclusively that radical mastectomy is or is not superior to simple mastectomy plus X-ray therapy. The data do not allow a clear-cut

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conclusion. McWirter's group compared five years of simple mastectomy and X-ray therapy with a previous five-year period of radical mastectomy and found the results superior. However, the results of radical mastectomy have improved for each five-year period in most hospitals. The patients are presenting themselves to the surgeon earlier as time goes on.

Let us consider cancer of the stomach. It was among the first of the visceral malignancies radically attacked by the surgeon. The technic described by Billroth has been changed very little since his day. It is true that extension of the confines of resection have been suggested. Lahey, at one time, raised the question as to whether total gastrectomy should not be done for all cancers of the stomach. Pack and McNeer have suggested the "extended resection," including the omentum and spleen. Their published reports showed a five-year survival rate superior to those which had previously been reported at that time. Shortly thereafter, however, some of the members of our group at the University of Pennsylvania looked up the results of gastric resection for cancer of the stomach in our hospital, and found that the five-year survival rate was slightly greater than that reported from the Memorial Hospital group. Doctor McNeer, who happens to have been a classmate of mine, met me one day in San Francisco and said, "You fellows at the University must really be radical in your gastric resections." As a matter of fact, the reverse is true. Our gastric resections have been conservative by and large, and certainly the patients operated upon at the University Hospital previous to five years ago did not have any more radical resection and probably much less radical than that described by the Memorial group. The question naturally arose as to why our five-year results were so good. I am inclined to think that this could be accounted for, at least in part, by the fact that we had taken a very aggressive viewpoint regarding gastric ulcer. It is probable that we may have had a larger percentage of patients with ulcer of the stomach with small areas of malignancy present than would be found in most series. Since the five-year survival rate would be high in such a group, that may have had a considerable influence upon the over-all results in our series. It is certainly true that it is theoretically possible that the extended type of gastric resection might in an occasional patient pick up that last lymph node that is involved with the disease. Our series, however, indicated that when the tumor was confined to the stomach and no lymph nodes were involved, the five-year survival rate was 54 per cent. Whereas if lymph nodes were involved, the five-year survival rate dropped to 22 per cent. If a high percentage of the patients are to be cured by the surgeon, the patient must present himself to the surgeon at a time when the tumor is still confined to the stomach. The data from the Surgical Service of the University Hospital, however, indicates that whereas 54 per cent five-year survival can be obtained in the patient in whom the tumor is confined to the stomach, nevertheless this represents only 16 per cent of the patients admitted to the Surgical Service. There certainly are a few additional patients who are admitted to the Medical Service or other services who never came to operation, so that the over-all five-year survival rate among the patients who were admitted to the hospital as a whole would be somewhat less than that figure.

Let us consider carcinoma of the lung. This is a cancer which appears to be on the increase, as opposed to cancer of the stomach which appears to be on the decrease in this country. There certainly appears to be ample evidence that the increase in cancer of the lung is related to the increase in the consumption of cigarettes in this country. The thoracic surgeon has repeatedly asked himself how the results in the treatment of cancer of the lung might be improved. The layman has obviously been interested in what the medical profession has to offer in this disease, as well as in other malignancies, and the fact remains that in our hospital when a patient with cancer of the lung walks in the front door, he has only a 9 per cent chance of being alive five years later. As far as I know, there are no reported data with a better five-year survival rate of the over-all unselected group of patients with cancer of the lung. The surgeon, in his endeavor to improve the salvage of this disease, has done pretty much the same as in other areas of malignancy. He has felt that he ought to try to extend the confines of the operation to get around the malignancy. I have been particularly interested in this field. It is not uncommon at the present time for the thoracic surgeon, in trying to deal with cancer of the lung, to remove not only the entire lung but also a portion of the chest wall, if the tumor happens to be kissed up against the chest wall, a portion of the diaphragm, the pericardium, a portion of an atrium perhaps, or other important structures. I must confess that my own personal experience has been that when I have extended my operation in this fashion, I have seldom benefited the patient by so doing. However, at the Thoracic Surgical meeting in Denver in 1950, Philip Allison, then of Leeds, applied the term "radical pneumonectomy" in the treatment of cancer of the lung in pretty much the same manner that we apply the term "radical mastectomy." His concept was that even though the tumor of the lung be small, a radical pneumonectomy should be carried out with the design to remove as large a spread of lymph node bearing area in the mediastinum as possible along with the lung. There was great appeal to this idea, for cer-

tainly if radical mastectomy be worthwhile in cancer of the breast, it would appear that radical pneumonectomy would be worthwhile in cancer of the lung. Unfortunately, no data are available as yet which indicate that the five-year survival figures are higher than with the standard type resection. This has been rather disappointing to me, as to most other surgeons, I am sure, because any surgeon likes to feel that he can help the patient more by being a little more aggressive. To date this has not been shown to be true in cancer of the lung. In our series we have found that we were able to carry out a resection in only a little over a third of the total group admitted to the hospital. Of the ones who were subjected to resection, there was five-year survival in 26.7 per cent but this constituted only 9 per cent of the total group admitted to the hospital. The best figures presently obtainable are those by Hughes at the Veterans Administration Hospital in Memphis, Tennessee, where 37 per cent five-year survival rate of all patients resected is reported. I happened to work with Doctor Hughes during the last few months of the war and know him to be a conservative surgeon. His resection rate was only 22 per cent of the total, whereas most of the rest of us had a resection rate of 35 per cent or more of the total. It is interesting to note, however, that in his end results, the percentage of five-year survivals among the total number of patients was 9 per cent, the same as ours. It would appear that Doctor Hughes in his conservatism has avoided operation on a good many patients who were not curative prospects but, at the same time, has carried out a resection on all the patients who were amenable to five-year survival.

Let us consider the problem of cancer of the esophagus. This is generally recognized by all surgeons in this field as being a rather miserable cancer to deal with. Many times in the past I have operated upon a patient with cancer of the esophagus and cut across the esophagus at what seemed to me to be a very good distance from the palpable tumor, only to find that the microscopists found malignant cells at the line of resection. I am sure it is also a frequent experience for thoracic surgeons, when operating upon a patient perhaps with cancer of the mid-portion of the esophagus, to open the abdomen and find metastatic disease around the celiac axis. This has led many surgeons to feel that in order to remove a cancer of the esophagus completely, a subtotal esophagectomy should be carried out in most, if not all, cases and as much of the lymphatic bearing area as possible surrounding the esophagus should be removed also. In 1955 when some of you present here were visiting with me in the British Isles, we saw Mr. Andrew Logan in Edinburgh do an extended type resection for cancer of the lower esophagus. It was the first time that I had seen a real bloc dissection done for cancer of the lower esophagus. He started out on the left side of the chest, as if he were taking out the aorta. He freed the mediastinum from the surrounding structures, from the aorta posteriorly and from the heart anteriorly, and removed the entire mediastinum from about the level of the bifurcation of the trachea downward, including the spleen, the tail of the pancreas, and the upper half of the stomach, skeletonizing the celiac axis, dividing the splenic and left gastric arteries, and leaving only the hepatic artery. I did not see the tumor until after the specimen was removed. I have not heard the five-year results of this effort but I have talked to Mr. Bruce of Edinburgh who said that the effort has been continued. I happened to talk to one of the associates of Mr. Logan a year or so ago. He told me that although the mortality for the operative procedure was about a third of the patients involved, yet half of the patients who survived the operation were alive at three years. This adds up to 1/3 three-year survival. What will turn up in five years of course we do not know, but it seemed fairly unlikely that the figures are going to be really superior to those recently reported from the Mayo Clinic in which there was 25 per cent five-year survival of those patients subjected to the standard type resection.

In reviewing this data it seems likely that the ultimate answer to cancer is not a more radical operation. We operate upon cancer only because we have no better form of treatment. To find a small tumor a centimeter in size in the lung or the stomach or the esophagus and to feel that the sacrifice of that entire organ is the only method of cure seems ridiculous. There is no one more aware of this than the surgeon. Likewise, there is no one more aware than the surgeon of how infrequently he can get a patient to operation at a time when cure is almost a certainty. For that reason it would seem to me that there is no one who should be more interested than the surgeon in trying to find some other cure for cancer. The results obtained in malignancy which I have briefly reviewed certainly suggest that the efforts to extend the surgery beyond the standard or commonly accepted types of resection have so far improved the end results little if any.

I fear that I may have been speaking of cancer as if it were one disease. No one is more aware than the surgeon that a cancer may behave in strange and mysterious ways. One cancer may grow so slowly as to cast real doubt upon whether it is a malignancy, while another spreads like wildfire. Even cancers of the same organ which exhibit only minor differences under the microscope may behave quite differently clinically. My old chief removed a lymph node from the mesentery of a patient and obtained a diagnosis of sarcoma. Twenty-five years

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later I removed a lymph node from the same patient's neck which looked identical microscopically to the one removed twenty-five years previously. Why had it been quiescent for twenty-five years?

Some years ago a patient with cancer of the breast was followed at the Philadelphia General Hospital, refusing either operation or X-ray therapy. She contained the tumor in her breast for almost fifteen years before it spread and led to her death.

Every surgeon has had some such experience. I have a patient under my care at present who had a radical mastectomy nineteen years ago. Twelve years later, or seven years ago, I removed a metastatic lesion six centimeters in diameter from her back. Another similar one on her sternum was treated with radium needles in sutures placed back and forth in this mass because I thought it was foolish to remove it surgically. Now seven years later, and nineteen years since her radical mastectomy, she has half a dozen small cutaneous nodules which are growing very slowly. What enzyme or antibody does this woman have which has held her cancer in check for nineteen years? If we could answer that question, it seems very probable that we might be well on our way toward the solution of the cancer problem. We are in the unfortunate position of not knowing the etiology of cancer. As far as I am aware, there is no pathologist who could look at a single cancer cell and say that it is a cancer cell and that it will behave differently toward its host than any other cell in the body. What it is that makes the cancer grow like wildfire in some instances and very slowly in others also is not known. So that a great deal of time and money has been spent and is being spent on the basic problem of the etiology of cancer. There are those who feel that eventually all human as well as animal cancer would be proved to be due to viruses. A great deal of scientific evidence at the present time points in this direction, and it may very well prove to be the case. If that should prove to be correct, we would be left with the problem of finding a chemotherapeutic or other agent which would be effective against the virus. To believe that this will not be accomplished is almost unthinkable. How long it will take to find such an agent, of course is not known but certainly such an agent will be found. No one is more interested in solving this than the surgeon who daily comes in contact with malignant disease.

At the present time a great effort is being carried on to try to find a chemotherapeutic agent which may have some effect upon the retardation of the growth of cancer. To date the results have been encouraging. The results have been encouraging in one respect particularly, and that is the fact that it has been possible to find that independent investigators in a large group of university hospitals are willing to subject themselves to the protocol of a careful scientific investigation to determine the usefulness of a specific drug. There are those who say that it is foolish to embark on such a program without knowing the cause of cancer. I would like to point out that many of the great discoveries in medicine have come about in this way. It is reasonable, therefore, it seems to me, to try out agents which give some promise in the control of cancer. By means of a large group of patients being subjected to a rigid protocol on a double-blind study, so that even the surgeon doesn't know which patient is getting the drug and which one isn't, it is possible within a relatively short period of time to evaluate the use of any particular form of therapy. This has been the greatest gain in the chemotherapy program to date. If it is possible to hold this group of investigators together in any one field of cancer, if an agent does come along which is claimed to have real virtue it will be possible in a very short period of time, a matter or two or three years, to say unequivocally whether a certain program is beneficial in the treatment of a specific cancer. Of the drugs which have been tried to date in the lung, stomach, and colon, none has been shown to be of real benefit. In the breast program, however, the use of Thiotepa in conjunction with radical mastectomy appears to give better results. Although it is obviously not a cure for cancer, the data, contrary to all of the other programs, indicates that the chances of recurrence within a two-year period after radical mastectomy has been materially decreased by the use of Thiotepa as it is now administered. Whether this particular agent and this particular method of administration turn out to be the answer for cancer of the breast or for any other cancer perhaps is not important but the important thing, I believe, is that we now have such a program set up where the various drugs can be evaluated rapidly so that when we do come upon the proper drug it will not take many years to find the truth.

The surgeon may look with pride at his accomplishments in the treatment of cancer. Many patients are alive today who except for the efforts of the surgeon would be dead. The thoughtful surgeon obviously must analyze why he is successful with one patient and why he fails in his efforts to save the life of another patient. As far as I can ascertain at the present time, it would appear that his successes are multiple in those patients in whom the tumor is confined to the organ in which it arose at the time he has an opportunity to treat that patient, whereas his successes are few indeed among those patients when the tumor has spread beyond the original organ in which it arose. Our abiding attention should be directed, therefore, to all efforts on our own part in the education of the

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ENDOSCOPIC CURVES*

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IF EVERY OPPOSING PITCHER would throw only fast balls through the strike zone, our Boston Red Sox would be undoubtedly in a much higher position in the league standings than they enjoy today; however, to keep the game from being a dull repetitious routine, the pitcher will throw an occasional curve ball that often will make the unprepared batter swing at the thin air.

I like to draw this comparison with our work and shall present a few of the cases I have seen which keep our work from being a dull repetitious routine. As a matter of fact, I hope to illustrate something further and that is; that endoscopy is an important and valuable diagnostic tool which rightfully belongs in the hands of the otolaryngologist. In some areas, there is a tendency to assign the pre-operative diagnostic workup to the surgeon if chest surgery is anticipated, with only the occasional foreign body removal being directed to the otolaryngologist. If we continue to tolerate such a situation, we shall find a rapid deterioration in our proficiency and thus lessening in the caliber of work in this field. Historically and by basic training, endoscopy belongs to the otolaryngologist. With the following group of cases, I hope to demonstrate definitely to you that we have a place in diagnostic endoscopy.

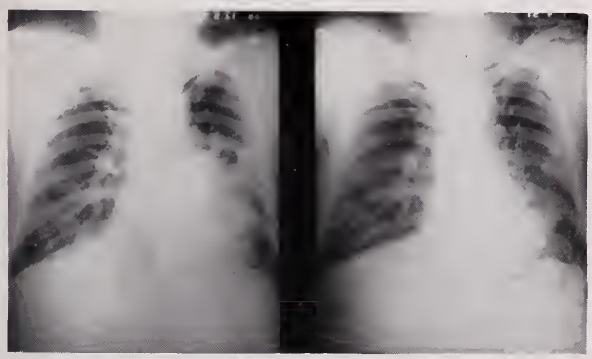


FIGURE 1

Figure No. 1 shows two chest films taken one month apart on a sixty-five-year-old white male who was treated with antibiotics for pneumonia. The film on the right shows clearing of the pneumonic process; but now an area of increased density is apparent in the left lower lobe, and also shift of the mediastinum to the left. There was persistent productive cough, but no weight loss. One episode of hemoptysis had been noted. Physical examination showed bronchial breath sounds over the left posterior chest. Bronchogenic carcinoma was suspected and a diagnostic bronchoscopy performed to obtain cell washings and biopsy if possible. To my surprise, a hard sliver of pork bone was wedged in the lower left main stem bronchus which was removed bronchoscopically using forward grasping forceps. Post-operatively, the patient then recalled having a choking and coughing attack about two years prior to admission while eating. He thought he had swallowed a bone but believed it would pass and had no further need of investigation.

Case No. 2 is a seventy-year-old white male who was seen at the Rhode Island State Hospital for Mental Diseases. He had been a patient there for ten years when I was asked to see him in consultation because of a cough of six months' duration and hemoptysis of two months' duration. Physical examination showed many rales to be present over the lung fields. Carcinoma was suspected since there had been a thirty-pound weight loss in the past six months in this long-time chain smoker. On bronchoscopy, granulations were found in the middle third of the left main stem bronchus. This was the site of his hemoptysis and projecting upward was a sharp-pointed foreign body. It was easily removed and found to be a curved piece of bone from a chop measuring 1.8 cm. in length, 1 cm. thick at the base and 0.6 cm. wide. This man had many auditory hallucinations as well as delusions of persecution; therefore, it was quite easy to overlook a progress note made some six months before which referred to the patient's refusal to eat food. "Food is not good for me. It goes into my chest and causes the little men there to bother me."

Case No. 3 was a sixty-five-year-old retired white male who gave a history of upper respiratory infection about one month prior to admission followed by dry cough and substernal pain. Figure 2 is his chest X-ray showing a right upper lobe atelectasis. A tumor was suspected, and even Pancoast tumor was mentioned; but accompanying signs were not present. As a further diagnostic aid, tomography was performed and showed a foreign body at the

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*Presented at the Spring Meeting of the New England Otolaryngological Society, at Rhode Island Hospital, Providence, Rhode Island, May 17, 1961.



FIGURE 2

13 centimeter level. Unfortunately, this was not reported until after a piece of chicken bone had been removed bronchoscopically. It was found with pointed end wedged in the right upper lobe bronchus, the broad end protruding into the main stem bronchus. Post-operatively, the patient remembered having choked on some chicken three weeks before at the same time he had a cold. A follow-up film three months later showed complete resolution of the atelectatic area in the right lung field.

These three cases are considered to be curves because the pre-operative impression was question of carcinoma, while the actual diagnosis was bronchial foreign body. They further tend to emphasize the basic importance of complete history, X-ray, and the use of all applicable diagnostic facilities. Finally, they are all ear, nose, and throat problems which are best handled by the man who, by training and daily work in specular examinations, has the manual dexterity.

Case No. 4 is that of H. S., a fifty-three-year-old colored male, who one month prior to admission complained of marked difficulty in swallowing solid foods and fluids, except milk. He had a considerable weight loss and an aspiration-type pneumonia. Naturally, one of the first requests made was for a barium swallow X-ray. This showed a large diverticulum (Figure 3). Its mouth was noted to be wide-necked, and only a tiny trickle of the barium passed from it into the esophagus on the distal side. It was so directed that its distal extremity was to the right of the midline. Ideally, all of these cases should have a preliminary endoscopic evaluation; but often this step is omitted. Fortunately, in this particular case, the surgeon requested endoscopic guidance during his procedure. As the esophagoscope was introduced, a normal cricopharyngeus was encountered; however, just distal to this there was a large dilatation with an irregular mass. The opening to the lower esophagus could not be located.



FIGURE 3

A biopsy specimen was obtained, and the frozen section diagnosis was epidermoid carcinoma. Therefore, the external approach was not attempted, and a difficult and unnecessary surgical exercise eliminated. The patient instead had a gastrostomy and palliative X-ray therapy. He succumbed in about six weeks, but the suffering which would have resulted from the contemplated surgery was eliminated.

T. C. was a sixty-two-year-old white male who came to my office complaining of increased dysphagia of one week's duration with obstruction of one day's duration. A barium swallow was obtained and approximately four inches above the level of the esophageal hiatus almost complete obstruction was encountered (Figure 4). Above the level of



FIGURE 4

obstruction, the esophagus showed some dilatation, but it was not otherwise remarkable in appearance. It was the impression of the radiologist that the changes in the distal esophageal segment represented a stricture on the basis of an inflammatory process, such as an esophagitis, which in turn would seem to be associated with hiatus hernia of the stomach. An esophagoscopy was performed and a large particle of undigested meat was removed with fenestrated meat forceps. Because of the mention of stricture, the esophagoscope was reintroduced to inspect the area beyond the impaction. At a point 35 cm. from the upper alveolar ridge an inflamed area was encountered which posteriorly was covered by a white membrane. This bled readily when disturbed. At the cardia, the tissue appeared to be firm and nodular. A biopsy specimen was obtained from this area. There was considerable inflammatory change in the entire lower esophagus due to the impacted foreign body, but it was my impression at the time that there was an underlying carcinoma. Histological examination of the biopsy specimen confirmed this, the diagnosis being adenocarcinoma. Surgery was advised but the patient refused and, therefore, was treated with cobalt irradiation. He improved during therapy but after about two months, he again became obstructed and sought surgery. He was explored but his tumor proved to be inoperable, and he died about one month later.

One final case is that of a thirteen-month-old male who was referred to the hospital because of noisy respirations from birth. A laryngoscopy showed the vocal cords to be normal in appearance and mobility. There was good structural support, and the upper glottis was not flabby as in laryngomalacia. Furthermore, the obstruction was not relieved, as is so often the case, by holding the blade of the laryngoscope in the upper laryngeal aperture. Therefore, an esophagram was performed using Lipiodol (Figure 5). This was reported as showing a smooth concave depression in the right side of the upper esophagus at the level of aortic arch.



FIGURE 5

There was a similar concave depression on the left side of the esophagus in this same area but at a slightly lower level, and there was a persisting narrowing of the esophagus with some interference to the passage of the opaque media at this level. The appearances in the upper esophagus were interpreted as being consistent with a congenital anomaly of the great vessels most likely a double aortic arch. Because at the time of treatment, his symptoms were so mild, surgery was deferred for two years. When finally performed, a double aortic arch was found with the right limb being the larger of the two. The left limb which went around to the left of the trachea and behind the esophagus was quite small. The latter was divided and a great deal more room for the esophagus and trachea to bulge to the left and forward was obtained. Today, the patient is a healthy normal eleven-year-old boy.

The first three curves that we analyzed seemed to be problems that would require thoracic surgery but they were truly ear, nose, and throat problems in that they were foreign bodies and were cured by an operative bronchoscopy. The last three cases had the appearances of routine ear, nose, and throat problems, but proved to be problems which required thoracic surgery. Therefore, I do not feel that the field of endoscopy can or should be split. The endoscopic and thoracic surgeons should be able to work harmoniously as members of a team dedicated to offering the very best possible service and treatment to the patient. The two fields, otolaryngology and thoracic surgery, should supplement each other rather than overlap, and the men involved should work in a spirit of friendly co-operation, rather than competitive rivalry. The thoracic surgeon's interest is primarily in treatment of malignancy but the diagnosis of this condition in today's practice encompasses a large percentage of the total endoscopies performed. However, none the less important are the study of the infant air and food passageways, the tuberculous chest, the burned esophagus, the cause and treatment of hemoptysis and hematemesis, and last but not least, the always intriguing mechanical problem of removing difficult foreign bodies. The Council on Medical Education and Hospitals in its Essentials of Approved Residencies in Otolaryngology requires an adequate experience in bronchoesophagology. For this reason, all endoscopic work at the Rhode Island Hospital has been limited to the Department of Otolaryngology. We feel duty bound to see that our residents have sufficient clinical material, and without the diagnostic workup of malignant pulmonary lesions, we do not feel able to give them adequate experience.

There are many of these "curves" in all branches of medicine, and it is the unusual case, and the case with complications that has brought about our

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CARCINOMA OF THE EXTERNAL AUDITORY CANAL*

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CARCINOMA of the external auditory canal is a rare entity. Bezold,[1] for example, saw only three cases out of 20,000 otologic patients over a period of twenty-four years. Nevertheless, since early diagnosis and treatment of this type of malignancy is so important, it is my opinion that presentation of the following case report may be of value in focusing attention on the various characteristics of this entity.

Report of a Case

The patient, a fifty-three-year-old female, was first seen in 1958 with the chief complaint of dryness and itching of the ears of many years' duration; oozing of the right ear canal had been noted off and on during the previous few months. Examination disclosed some serous fluid in the right ear canal and scaling of the scalp. The diagnosis of otitis externa on a seborrheic basis was made. Two months later, after a course of local therapy, her ears were asymptomatic and examination disclosed no abnormalities. She was next seen seventeen months later and reported that there had been occasional dryness and itching of the ears, particularly the right, and that during the past few weeks there had been pain in the right ear canal. Examination disclosed scaling of the left canal and erythema, superficial erosion and slight purulent discharge in the right canal. The patient returned three months later and stated that the pain in the right ear had persisted despite the use of Aerosporin® Otic Solution. Examination then revealed a mild amount of crusting in the right external auditory canal. The degree of visible involvement did not seem enough to explain the pain described, and it was recommended that she consult an otologist.

The following day she was seen by Doctor Mendell Robinson of Providence who kindly supplied the following information. Examination showed a moderate amount of purulent debris in the right ear canal. This was removed and an area of granulation was noted on the floor of the canal. Five days later, after use of Cortisporin® Otic Solution, much less discharge was present but the granulation was still evident. The latter was removed under general anesthesia. The histopathological report, confirmed by several pathologists, was epidermoid carcinoma, grade II. She was referred to Doctor Daniel Miller of Boston who resected the entire area. Several weeks later the granulation was found in the mastoid cavity. This was removed and found to be epidermoid carcinoma. She was then started on a course of radiation therapy in the Radiation Therapy Department of the Massachusetts General Hospital. As of March 1961, fifteen months after treatment, there has been no obvious recurrence.

Discussion

The most frequently encountered malignancy of the external auditory canal is squamous cell carcinoma; only rarely have sarcoma, basal cell epithelioma, or other types of malignancy been reported in this location. The triad of symptoms which typically accompany carcinoma of the canal are: (1) severe pain, (2) chronic discharge, and (3) impairment of hearing. In many instances the triad is not complete but pain is almost always present. Findings on otoscopic examination may vary from what appears to be a small amount of granulation tissue in the early stage, to a mass that may fill the canal in the more advanced stage. Frequently the discharge present may make visualization of the tumor difficult. With progression of the tumor there is local extension with involvement of bone or vital structures and later metastasis to regional lymph glands. If the primary lesion is not checked, death usually occurs from local extension to vital structures.

Early diagnosis of squamous cell carcinoma of the external auditory canal is imperative. Accordingly, biopsy of any suspicious looking lesion in this region is indicated. Treatment generally employed involves surgical excision followed by X-ray therapy.

*Presented at the Fourth Annual Meeting of the Noah Worcester Dermatological Society, March 23, 1961, at Nassau in the Bahamas.

SUMMARY

1. A case of squamous cell carcinoma of the external auditory canal is reported.

2. Severe persistent pain in the ear, particularly if associated with chronic otitis externa, impairment of hearing, or both, should alert the physician to the possibility of carcinoma of the canal.

3. Early diagnosis and therapy are imperative.

REFERENCE

[1]Bezold, cited by Peele, J. C., and Hauser, G. H.: Primary Carcinoma of the External Auditory Canal and Middle Ear. Arch. Otolaryny. 34:254 (Aug.) 1941

A SURGEON LOOKS AT CANCER

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general practitioners who see these patients first, in the education of the patients themselves through such agencies as the American Cancer Society to get the patient to the surgeon as soon as possible regardless of the location of the tumor.

On the other hand, the thoughtful surgeon must be aware that in order to make a real imprint upon the cancer problem we must look elsewhere. Whether it will be a vaccine, a chemical, an antibiotic, the use of electric currents or what, it is obvious that some other modality is needed to influence profoundly the course of this disease. I, for one, am sure that such a solution will be found. By what method this solution will be brought about, of course, I do not know, but I hope that not only will many of us live to see that solution but that many of us may in some small way help to bring that solution about.

ENDOSCOPIC CURVES

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present system of specialization in medicine. Therefore, what could be more highly specialized than the visualization and operation through tubes of varying lengths with the lumen of 8 millimeters or less? Anyone can learn the mechanics of inserting the tube properly, but only with long experience can the interpretation and art of manipulation be mastered. I feel further that the otolaryngologist is the man who is in the best position to gain the wide experience to cover the over-all field of endoscopy, and that every attempt should be made by the departments of the hospital to develop and utilize his talents. The six cases I have presented were referred from a radiologist, a psychiatrist, an internist, a general surgeon, a general practitioner, and a pediatrician.

In conclusion, may I again urge that endoscopy be considered an important and proper part of otolaryngology. This is an obligation which we have to the patient, to the resident in training, to other departments of the hospital struggling with diagnostic problems, and to our colleagues in the field of otolaryngology, who are ever trying to improve and enlarge the specialty.

[The Kefauver-Celler Bill] poses a real and present danger to the drug industry, but also to the vastly greater area of freedom that includes freedom for American business and for Americans. If this bill becomes a model, then no area of American life is free from the threat of increasing central control, increasing bureaucratic conformity, and decreasing individual freedom. The American medical profession is also under attack. We are asked to believe that the only way to provide our senior citizens with adequate medical care is by compulsory payroll taxes on all wage earners, by compulsory programs of insurance, by compulsory participation in one massive, rigid, government-controlled scheme.... What sense does such a proposal make? It makes no good sense at all, except in an America that has given up its heritage of freedom and joined the dull, drab ranks of the bureaucratic superstate.

—RICHARD M. NIXON to Pharmaceutical Advertising Club, June 27, 1961

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CARDIAC ARREST*

J. JOHN YASHAR, M.D.

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DURING THE PAST several decades, in spite of improvements in pre- and postoperative care of patients and increased knowledge of cardiorespiratory physiology, the incidence of cardiac arrest has markedly increased. This increased frequency has been attributed to combinations of various anesthetic agents, newer anesthetic agents, more frequent operations on the cardiovascular system, and surgery on poor risk, old, or debilitated patients. Review of the recent literature reveals that the incidence of cardiac arrest varies from one to one thousand up to one to three thousand operative cases.[1-7] Stephenson on the basis of reports from 30 large medical centers estimated this incidence as one per 2,125 operations.[8]

In 29,716 operations at the Miriam Hospital during the six-year period 1955-60 there were 20 cases of cardiac arrest (one per 1,485). If cases occurring during or after cardiac surgery are excluded the incidence would be one per 2,071 operative cases. It is the purpose of this study to evaluate various factors related to this unfortunate accident in the hope of better understanding its causes.

Place of Arrest

The majority of arrests occurred in the operating room during the operative procedure (Table I). Arrest also occurred in the recovery room, in the elevator while the patient was being returned to his room, and in the patient's room.

TABLE I
Place of Arrest

Place	No. of Cases
Patient's Room	2
Elevator	2
Recovery Room	1
Operating Room	15

*From the Surgical and Cardiopulmonary Departments, the Miriam Hospital, Providence, Rhode Island. Read at the Providence Surgical Society meeting, February 13, 1961.

Type of Anesthesia

Types of anesthesia were as follows: local and topical 3, spinal 2, and general 15. A wide variety of anesthetic agents were used (Table II). The majority of patients received sodium pentothal and nitrous oxide. The role of various anesthetic agents is difficult to evaluate, because it is common practice to use several anesthetic agents during an operative procedure. The dangers inherent in such a practice have been stressed by Dinsmore.[9] Six patients (30 per cent) received no preoperative medication. Five of these patients underwent emergency operation, and, due to the poor condition of the patient prior to surgery and the emergency nature of the procedure, no preoperative medications were given. In the remaining cases preoperative medication usually consisted of atropine and Demerol® according to the size, weight, and age of the patient.

TABLE II
Agent Used for General Anesthesia

Agent	No. of Cases
Na. Pentothal and Nitrous Oxide	5
Na. Pentothal and Ether	2
Na. Pentothal and Succinocholine	1
Cyeloprocaine and Ether	3
Vinethine and Drop Ether	3
Total	14

Time of Occurrence

The time of occurrence of cardiac arrest varied from a few minutes after induction of anesthesia up to about 14 days after the completion of surgery (Table III). In two patients who underwent bronchoscopy, the occurrence of cardiac arrest was instantaneous with the introduction of the bronchoscope. In two patients under spinal anesthesia cardiac arrest occurred four to five minutes after intrathecal administration of anesthetic agents. In the laparotomy cases the occurrence of cardiac arrest varied from the time of peritoneal incision (during a liver biopsy under local anesthesia) up to 25 minutes after the completion of surgery. In thoracic and cardiovascular cases the majority of cardiac arrests occurred during the difficult part of surgery, during manipulations inside the heart, or around the great vessels.

TABLE III

Time of Arrest in Relation to Beginning of Anesthesia

Time	No. of Cases
1-2 Min.	2
4-5 Min.	2
7-10 Min.	1
15-20 Min.	2
1 Hour	5
2 Hours	3
4 Hours	1
5 Hours	2
6 Hours	1
14 Days	1

Warning Signs

More than half the patients had no warning sign prior to cardiac arrest (Table IV). In the remainder hypotension, irregular heart beat, short period of apnea during spinal anesthesia, dyspnea, chest pain, and vomiting preceded the occurrence of cardiac arrest. In one patient who underwent liver biopsy under local anesthesia and who was receiving cortisone therapy prior to the operative procedure no cortisone was given during the operation.

TABLE IV

Warning Signs

Hypotension	3
Irregular beat	2
Apnea	1
Dyspnea, chest pain and vomiting	2
Cortisone therapy	1

Etiology

In almost half of the entire group there is evidence that hypoxia, and possibly hypercapnia, played a major role in the production of cardiac arrest (Table V). In six patients inadequate respiratory exchange was the major cause. Massive hemorrhage and inadequate replacement of the blood loss was the major factor in two patients. Aspiration and blockage of the airway was considered a primary cause in one patient. In four patients vago-vagal reflex appeared to be a major factor in the cardiac arrest. In two of these patients hypoxia coupled with vago-vagal reflex appeared to be the precipitating factor. Primary arrhythmia during cardiac and thoracic surgery, either during hypothermia or extracorporeal circulation, was considered to be the cause in four patients. In two cases it was impossible to assign a definite cause since important facts concerning the conduct of anesthesia and the degree of surgical manipulation were not recorded. It is possible that in these cases vagal stimulation was the primary cause of cardiac arrest.

TABLE V

Primary Causes of Cardiac Arrest

Cause	No. of Cases
Anoxia:	
Hypoxia	6
Hemorrhage	2
Aspiration	1
Vagal Stimulation:	
Direct	3
Reflex	1
Arrhythmia	4
Acute Adrenal Insufficiency	1
Unknown	2

Contributing Causes of Cardiac Arrest

Myocardial damage either as a result of coronary insufficiency, arteriosclerotic heart disease, or heart failure are thought to be contributing causes in six patients (Table VI). All of these six patients were considered to be poor risks preoperatively. Five patients received more than five transfusions prior to the cardiac arrest. The average transfused blood was about 9½ days old. It is possible that in these patients the high potassium content of the banked blood, which increases with the length of storage, played a role in the production of the cardiac arrest.

TABLE VI

Contributing Causes of Cardiac Arrest

Causes	No. of Cases
Arteriosclerotic Heart Disease	6
Heart Failure	1
Hypertension	1
Massive Transfusion	5
Asthmatic	1
Apprehension	1

Duration of the Arrest

In fourteen cases the duration of cardiac arrest varied from a few seconds up to six minutes prior to resuscitative measures. In the remaining patients the duration of cardiac arrest was not mentioned in the record. It is likely that in these cases the standstill was five minutes or longer prior to effective resuscitative measures.

Treatment

With two exceptions cardiac massage through the thoracotomy incision was the major therapeutic method. In two patients no attempt at cardiac massage was made. A variety of drugs such as atropine, calcium chloride, adrenalin, prostigmin, neosynephrine, and potassium chloride were used in addition to the defibrillator and cardiac massage. Calcium chloride in 10 per cent solution was used for flabby hearts during arrest, or where the heart beat appeared to be ineffective after resuscitative measures. The response was usually dramatic with great improvement in the cardiac tone and contraction. The drug was injected in the left ventricle, and the injection was followed by cardiac massage for coronary circulation. Atropine was usually used in bradycardia with a satisfactory response. Vasopressive drugs such as adrenalin and neosyne-

continued on next page

phrine, were used for periods following adequate cardiac massage with no sign of cardiac activity and in cases with low cardiac output after resuscitative measures. In severe hemorrhage where restoration of blood volume appeared to be of prime importance intraarterial transfusion of whole blood was given. Ventricular fibrillation occurred as a primary arrhythmia in only one case which was satisfactorily treated with the electric defibrillator. However, ventricular fibrillation occurred during resuscitative measures for cardiac standstill in a number of patients. Although the ventricle almost always could be defibrillated by electric defibrillator, no patients survived.

Results

Complete recovery was attained in four patients without any cerebral or cardiorespiratory sequelae. Cardiac function alone was restored in seven patients. All these patients had cerebral damage evidenced by deep coma, convulsions, high fever, and, on one occasion, paraplegia. These patients died from 12 hours to three days after cardiac arrest. In seven patients resuscitative measures were not successful, and the heart beat could not be revived. The majority of these patients were old and of poor risk, and had associated cardiac pathology (Table VII).

TABLE VII
Results of Resuscitative Measures

Result	No. of Cases
Complete Recovery	4
Cardiac Function Alone Restored	7
Failure	7
No Massage	2

Discussion

Unexpected cessation of the heart beat is the most serious of all operating room incidents. Among our cases no common denominator could be found. Although the majority of arrests occurred in the operating suite, arrest in the recovery room, in the elevator, or in the ward was not unusual. It occurred at any time during the operative procedure. There was no correlation with the type of procedure (Table VIII), age, or clinical condition of the patient. Hypoxia and vago-vagal reflex appear to be the major etiological factors in the production of cardiac arrest. Administration of banked blood with a high potassium content, lack of preoperative medication, and pre-existing heart disease were the major contributing causes. In patients with pre-existing heart disease there was not only a higher incidence of cardiac arrest (two to one), but also a much lower chance of complete recovery than in non-cardiacs. It must be emphasized that the two most important factors in the management of cardiac arrest are time and preparedness. In seven patients in whom cardiac massage was instituted as soon as the diagnosis was established there were three complete recoveries (Table IX). However, in the remaining patients in whom the duration of cardiac arrest was more than a few minutes, only one patient survived. Even though the hearts in some patients were resuscitated, cerebral damage and eventual death ensued.

TABLE VIII
Type of Operation

Cardiac Surgery	6
Laparotomy	4
Aortic Surgery (Thoracic)	3
Bronchoscopy	2
Pneumonectomy	1
Pectus Excavatum	1
Vascular Surgery	1
Cystoscopy	1
Hip Nailing	1

TABLE IX
Approximate Duration of Cardiac Arrest at the Time Resuscitation Was Begun

Duration	Total Cases	Cardiac Function Alone Restored	Complete Recovery
> 1 Min.	7	2	3
2-4 Min.	4	1	0
4-6 Min.	3	2	1
Unknown	4	1	0

Summary and Conclusion

Of primary importance in coping with the problem of cardiac arrest is the elimination of factors that may initiate hypoxia and vagal stimulation. Upon recognition of warning signs at any stage of operation, such as hypotension, irregular heart beat, bradycardia, and cyanosis, the alarm must be sounded. Resuscitative measures must be undertaken as soon as the diagnosis is established. They may not be delayed more than a few minutes if there is to be any hope for complete recovery. General measures include careful preoperative evaluation of the patient; preoperative vagal inhibition with atropine, and additional dosage during prolonged operative procedures; adequate oxygenation and ventilation; close observation of changes in cardiac rate, rhythm, and blood pressure; gentle surgery; adequate replacement of blood loss and use of fresh blood where massive replacement is required; and constant attendance upon the patient. Frequent reminders to the staff of the causes, methods of prevention, and treatment of cardiac arrest are essential.

Addendum

Since the original description by Jude[10] and associates of closed chest cardiac massage, we have

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CONTINUOUS ARTERIAL INFUSION CANCER CHEMOTHERAPY*

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INTRODUCTION

INCREASING NUMBERS of cancer chemotherapeutic agents are available for use in the management of far-advanced malignant neoplasms. However, definitive clinical studies have demonstrated that the usefulness of these compounds is largely limited to the leukemias and lymphomas. The vast majority of human neoplasms has shown only slight and variable response to these chemotherapeutic compounds. The different classes of compounds that have received some clinical trials include the alkylating agents,[1,2] antimetabolites (including the purine analogues,[3] pyrimidine analogues,[4] and antifolic compounds[5]), antibiotics[6] and miscellaneous compounds.[7]

Over the past ten years our program has been designed to enhance the antitumor effects of cancer chemotherapeutic agents by regional administration. It has been shown that the arterial administration of nitrogen mustard will produce profound local effects on normal structures as well as regressive effects on a variety of tumors that have not been observed after the intravenous use of this drug.[8,9] The practical usefulness of this form of therapy, however, is sharply limited by the lack of specificity of nitrogen mustard.[1,10] Preliminary studies were undertaken to investigate the effects of the arterial administration of chemotherapeutic agents that have a more specific antitumor and antimetabolic effect[11-14] than have the alkylating agents. Over the past several years, a number of antimetabolites have been studied by this route of administration, including the glutamine antagonist, O-diazoacetyl-L-serine (Azaserine), the pyrimidine antagonists, 5-fluorouracil and 5-fluoro-2′-deoxyuridine, and the antifolic compound, 4-amino-n[10]-methyl pteroylglutamic acid (Methotrexate).[15] Antimetabolites, however, require a more prolonged period of action before clinical antitumor effects are produced.[5,16] It seemed reasonable, therefore, to prolong the duration of administration of an antimetabolite in order that those cells which at any given moment are in a metabolically inactive phase might be affected by the antimetabolite as they sequentially enter a metabolically active phase. Since the biologic effect of many antimetabolites can be effectively prevented by the concomitant administration of the specific metabolite (antidote),[17,18] it was postulated that the continuous arterial (regional) administration of supralethal doses of an antimetabolite together with the intermittent use of the metabolite (antidote) administered systemically (i.e., intramuscularly) might result in an enhanced differential antimetabolic effect in the regional area, while the vulnerable systemic areas of the body were protected by the antidote.

A method of therapy has been developed embodying these hypotheses as follows: the continuous 24-hour administration of an antimetabolite through a catheter inserted into a known site in the arterial blood supply of localized forms of far-advanced cancer, together with the intermittent, intramuscular administration of the specific antidote. Preliminary clinical studies using Methotrexate as the antimetabolite and citrovorum factor (leucovorin, C.F.) as the metabolite have been described in patients with various forms of localized, but far-advanced cancer.[19-21] This method of therapy is to be distinguished from the extracorporeal isolated perfusion[22] which embodies the temporary exclusion of the tumor-bearing area from the general circulation for periods of 30 to 60 minutes, during which time high concentrations of a drug are perfused in the isolated part. The purpose of this communication is to describe our further experiences with this method of therapy in patients with far-advanced cancer.

Methods

Selection of Patients. Patients with advanced cancer who were not considered suitable candidates for conventional therapy were selected for study. Patients with various types of primary head and neck cancer without known metastases or with cervix or bladder cancer confined to the area of the pelvis are the most suitable candidates for study.

continued on next page

*Presented at the Annual Joint Meeting of the Rhode Island Medical Society and Rhode Island Cancer Society, at Providence, Rhode Island, March 7, 1961.

In some instances a patient with an inoperable primary form of head and neck cancer but with unilateral or bilateral resectable neck nodes was a candidate for combination surgery and arterial infusion chemotherapy. In this situation the neck metastases can be controlled with radical neck dissection while the inoperable primary lesion can be treated by arterial chemotherapy. Patients with symptomatic metastases outside the areas of infusion, whose disease in these areas could not be controlled by other means, were not suitable candidates for this form of regional chemotherapy. Patients who had previously had radiotherapy whose recurrent or unresponsive disease is within the distribution of one or more accessible arteries were suitable candidates for a trial of infusion therapy.

Catheter Insertion and Infusion Assembly. The catheter was prepared from PE-60 Clay-Adams polyethylene tubing with an inside diameter of 0.030 inches and an outside diameter of 0.048 inches. The technique of catheter insertion is as follows: After adequate exposure of at least one inch of the artery into which the catheter is to be placed, a No. 4-0 silk purse-string suture is applied to the most proximal part of the exposed vessel. Hemostasis is obtained with a Beck-type arterial clamp, an incision is made in the center of the purse-string, and the catheter is inserted by means of a No. 4-0 catgut suture applied to the end of the catheter (Fig. 1A). The purse-string suture is tied as the hemostatic clamp is removed. In order to prevent subsequent displacement of the catheter, a No. 3-0 silk suture is applied to the catheter as it issues from the vessel sufficiently tight to groove the catheter wall. A free end of this suture is passed through the adjacent arterial wall and snugly tied.

A fluorescein dye injection technique is used to determine the exact area of infusion. The dye is injected while the patient is in the operating room before the wound is closed in order to ascertain whether the tumor is within the area of infusion therapy. A total of 3 to 6 cc. of Fluorescite is injected into the catheter slowly over a period of about one minute. Fluorescence of the area of infusion develops within a few seconds and will persist up to 30 minutes. Ultraviolet illumination will delineate the capillary bed to be infused. In the external carotid area, fluorescence will be seen through the distribution of this vessel to the midline including the skin of the upper neck, face and scalp, the tongue, palate, oral and nasal mucosa, and so forth. A variable amount of absence of fluorescence is noted in the palpebrae and forehead areas, as these areas are supplied by the terminal branches of the internal carotid arteries. If the catheter has been inadvertently inserted into the internal carotid artery, only the latter areas will fluoresce. Injection

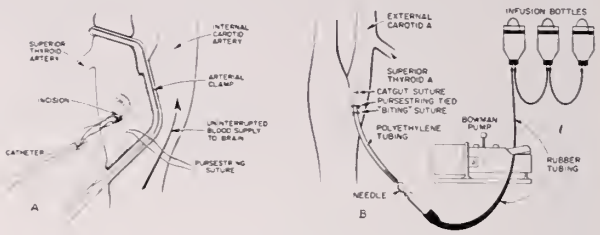


FIGURE 1A
Technique of catheter insertion

FIGURE 1B
Infusion assembly

of dye into a catheter situated in the hypogastric artery will produce fluorescence of the pelvic viscera and pelvic walls on the side injected. Fluorescence will also be noted in the skin of the gluteal and perineal areas, the anus, vagina, scrotum and the glans of the penis.

In patients with bilateral head and neck cancer, catheters are inserted into both external carotid arteries through bilateral neck incisions. In patients with cervix or bladder cancer, catheters are usually inserted into both hypogastric arteries. The surgical approach is through a single midline, transperitoneal incision, or extraperitoneally, via bilateral incisions. The external carotid catheter is brought out through the inferior margin of the skin incision and without fixation to the skin. The catheter in the hypogastric artery is brought through the anterior abdominal wall in the region of the anterior superior iliac spine, using a large bore needle. The catheters are flushed with saline solution and the proximal end is clamped. The clamp is affixed to a convenient site with adhesive tape, leaving sufficient slack to permit free movement.

The infusion assembly is put in operation as soon as the patient has recovered from the operation and glucose and water or saline solution is infused to keep the catheter patent; therapy may be instituted at any suitable interval, depending on the patient's general condition. A No. 20 gauge intravenous-type needle is inserted into the free end of the catheter and the former attached to rubber tubing which passes through the fingers of a Bowman infusion pump and is connected through a drip chamber to liter bottles of infusate (Figure 1B).

Dosage Schedules. The usual dose schedule for unilateral catheterization was Methotrexate, 50 mg. per 24 hours, infused in 1000 ml. of saline solution or glucose and water. The dose schedule for bilateral catheterizations was Methotrexate, 25 mg. per side per 24 hours, infused in 1000 ml. of glucose and water or saline solution per side. Multiple liter bottles were set up in tandem to obviate the possibility of air embolism resulting from the inadvertent emptying of a single infusion bottle. Citrovorum

factor (antidote) was given intramuscularly in the dose of 6 mg. every six hours. On these dose schedules an adequate course of therapy required five to ten days of continuous arterial infusion. An adequate course of therapy is defined as that amount of therapy that results in moderate local toxicity (diffuse unilateral or bilateral superficial mucosal ulcerations or erythema of the skin) or systemic toxicity (diffuse oral mucosal lesions, hematologic depression). At the completion of an adequate course of therapy, the patient was rested and the catheter kept patent with the continuous infusion of glucose and water or saline solution. Further courses of therapy were given until maximal clinical benefit was obtained. In most cases, maximal clinical benefit was noted after one to three courses of therapy had been given. The hemogram is followed closely in order to prevent serious systemic toxicity from the large doses of Methotrexate used. After the third day, the white blood cell count is obtained every 12 hours. When evidence of systemic toxicity is present, therapy is immediately discontinued or the amount of antidote (C.F.) is increased. Patients with renal insufficiency do not excrete Methotrexate in a normal manner. Considerably larger doses of the antidote may be required to prevent severe systemic toxicity.

Results

Fifty-one patients with various types of advanced head and neck cancer have had unilateral or bilateral external carotid catheterization as follows: epidermoid carcinoma, 43 patients; lymphosarcoma, six, and miscellaneous forms of cancer, two (Table 1). There were 42 patients in whom at least one adequate course of therapy was given. An adequate course of therapy has been defined above and was considered to have been given when moderate local or systemic toxicity was noted. In four patients who received one adequate course of therapy the therapeutic effect was not evaluated because of the difficulty in determining the clinical extent of the disease; the therapeutic effect was evaluated in 38 patients. In 28 patients, there was *some* partial objective regression of tumor, often associated with clinical benefit. In the majority of these patients, cancer was present in contiguous areas outside the actual area of infusion therapy. In eight patients whose disease was confined to the area of therapy, *total* objective tumor regression was obtained.

Eleven patients with primary and metastatic brain neoplasms had unilateral or bilateral internal carotid catheterization as follows: primary brain tumors, five patients; metastatic brain tumors, four patients, and retinoblastoma, two patients. There were five patients in whom at least one adequate course of therapy was given and the therapeutic effects were evaluated. In two patients with primary brain tumors (glioblastoma multiforme) and one patient with metastatic (bronchogenic) carcinoma, evidence of partial objective tumor regression was present associated with clinical benefit.

Six patients with carcinoma of the cervix have had bilateral hypogastric artery catheterization. Five patients received at least one adequate course of therapy and the therapeutic effect was evaluated. In four patients there was partial tumor regression and in one patient, complete objective tumor regression.

In those patients in whom measurable disease was present in the areas of therapeutic infusion, response was noted as early as the fourth day and was characterized by a progressive decrease in visible tumor. The tumors appeared cleaner as they regressed and were apparently absorbed as the neoplastic cells were sequentially killed. Mucosa often covered the sites of absorbed tumor but in many

continued on next page

TABLE 1

Results of Continuous Arterial Infusion Cancer Chemotherapy

	Catheterization, No. of Patients	Adequate Course of Therapy, No. of Patients	Therapeutic Effect Evaluated, No. of Patients	Tumor Response Partial No.	Tumor Response Complete No.
Head and Neck Neoplasms (ext. carotid artery)					
Epidermoid carcinoma	43	34	30	23	6
Lymphosarcoma	6	6	6	4	2
Miscellaneous	2	2	2	1	0
Brain Neoplasms (int. carotid artery)					
Primary tumors	5	2	2	2	0
Metastatic tumors	4	2	2	1	0
Retinoblastoma	2	1	1	0	0
Carcinoma of Cervix (hypogastric artery)	6	5	5	4	1
Totals	68	52	48	35	9

cases large defects remained, especially in patients who had sinus tumors with extensive involvement of the hard palate.

In those patients in whom partial tumor regression occurred, response has lasted from one to three months. In those patients in whom total tumor regression occurred, response has persisted for follow-up periods of up to 18 months.

Complications relating to catheter insertion and maintenance of infusion assembly are tabulated in Table 2. Varying degrees of local or systemic Methotrexate toxicity were noted in most patients. The former was characterized by a mucositis and slight erythema of the skin within the areas of therapy. Systemic toxicity was characterized by varying degrees of hematologic depression and nonspecific oral ulceration. In most cases systemic toxicity was moderate and could often be controlled by adjusting the dose of the antidote. However, complete tumor regression occurred in several patients without the development of any manifestations of systemic drug toxicity.

Discussion

The results of this study demonstrate that the antitumor activity of an antimetabolite (Methotrexate) can be increased in patients with various types of far-advanced yet localized forms of cancer when given by regional administration (arterial infusion) in supralethal doses, together with the specific antidote (C.F.) given in appropriate dosage by the systemic route to protect vulnerable areas of the body.

The increased antitumor activity of Methotrexate noted in this study is considered to be related to the following factors: (1) The continuous 24-hour administration of the antimetabolite resulting in a *continuous* antimetabolic effect. Thus, with continued exposure of the tumor cells to the antimetabolite, those cells that at any given moment are metabolically inactive may be affected as they sequentially enter an active metabolic phase.[23] (2) The arterial route of administration resulting in a higher local concentration[24] and hence a greater local antimetabolic and antitumor effect. (3) The systemic use of the antidote permitting the administration of supralethal doses of the antimetabolite.

The complications of catheter insertion and maintenance of infusion assembly were frequent and often serious (Table 2). In six patients there was inaccurate catheter placement or premature displacement. In 12 patients, infection associated with varying degrees of bleeding occurred. In several patients, the hemorrhage was of such severity that ligation of one or more of the great vessels of the neck, and in one patient of the hypogastric artery, was necessitated. Leakage of infusate of varying degrees was noted in eight patients. In most of these patients the leakage prevented completion of the therapy.

Inaccurate placement of the catheter may be prevented by careful attention to techniques of catheter insertion and the use of the fluorescein dye technique to demonstrate accurately the area of infusion therapy. Premature displacement of the catheter results from the inadequate application of the "holding sutures" as the catheter issues from the artery. Infection around the catheter, in most cases the cause of hemorrhage, is usually the result of failure to observe rigid sterile precautions. It must be emphasized that the most meticulous sterile techniques must be used whenever the catheter or the infusion assembly is manipulated in order to obviate this serious complication of infection and hemorrhage.

Other methods of catheter insertion, including retrograde catheter introduction and the ligation of various arteries to develop collateral circulation into inaccessible areas, are being explored to extend the usefulness of this method of therapy and to reduce the complications of techniques currently in use. Other dose schedules of Methotrexate and C.F., as well as other cancer chemotherapeutic agents, are currently being investigated by this method of administration.

This method of therapy is in the area of clinical investigation and its possible place in the conventional therapy of various malignant neoplasms is not yet clearly defined. The casual use of this technique of drug administration is strongly dis-

TABLE 2

Complications of Catheter Insertion and Infusion Assembly

	Catheterization, No. of Patients	Inaccurate Placement or Premature Displacement, No. of Patients	Infection and/or Bleeding, No.	Leakage of Infusate, No.
External carotid artery	51	6	9	6
Internal carotid artery	11	0	1	0
Hypogastric artery	6	0	2	2

couraged; a team consisting of surgeons and cancer chemotherapists cognizant of the problems of techniques and drug toxicity, together with a carefully planned program of clinical investigation, is mandatory before initiating a program of regional infusion.

SUMMARY

A method of regional cancer chemotherapy is described which embodies the 24-hour arterial administration of supralethal doses of an antimetabolite, together with the intermittent use of the specific metabolite by the intramuscular route to prevent serious systemic toxicity. Clinical studies using Methotrexate as the antimetabolite and citrovorum factor (leucovorin, C.F.) as the metabolite are described in patients with far-advanced cancer of the head and neck, primary and metastatic brain tumors and carcinoma of the cervix.

Techniques of catheter insertion and fixation, maintenance of infusion assembly and dose schedules are reported. Fifty-one patients with various types of incurable cancer of the head and neck had unilateral or bilateral external carotid catheterization. In 42 patients at least one adequate course of therapy was given. The therapeutic effect was evaluated in 38 patients. Of these, 28 patients had partial tumor regression. In these patients, tumor was also present in contiguous areas outside the area of infusion therapy. In eight patients in whom tumor was present only in the area of therapy, complete apparent tumor regression occurred. Response persisted for one to three months in the former category and up to 18 months of follow-up in the latter category.

Complications were frequent and consisted of inaccurate placement of catheter or premature displacement of catheter in six patients, infection or bleeding, or both, around the catheter in 12 patients, and leakage of infusion around the catheter in eight patients.

Techniques are being explored to extend this method of therapy to other areas of the body, and other chemotherapeutic compounds are currently being investigated for possible enhanced antitumor effects resulting from continuous arterial administration.

This method of administration is in the area of investigation and its place in clinical medicine is not yet defined. The casual use of this technique is strongly discouraged. A team consisting of surgeons and cancer chemotherapists, aware of the many problems relating to techniques and drug toxicity, is mandatory before initiating a program of regional infusion in view of the rather high incidence of complications.

References

[1]Karnofsky, D. A.: Summary of Results Obtained with Nitrogen Mustard in Treatment of Neoplastic Disease. Ann. New York Acad. Sc. 68:899, 1958

[2]Karnofsky, D. A.; Burchenal, J. H.; Armistead, G. C., Jr.; Southam, C. M.; Bernstein, J. L.; Craver, L. F.; and Rhoads, C. P.: Triethylene Melamine in Treatment of Neoplastic Disease; Compound with Nitrogen-Mustard-like Activity Suitable for Oral and Intravenous Use. A.M.A. Arch. Int. Med. 87:477, 1951

[3]Burchenal, J. H.; Murphy, M. L.; Ellison, R. R.; Sykes, M. P.; Tan, T. C.; Leone, L. A.; Karnofsky, D. A.; Craver, L. F.; Dargeon, H. W.; and Rhoads, C. P.: Clinical Evaluation of New Antimetabolite, 6-Mercaptopurine, in Treatment of Leukemia and Allied Diseases. Blood 8:965, 1953

[4]Curreri, A. R.; Ansfield, F. J.; McIver, F. A.; Waisman, H. A.; and Heidelberger, C.: Clinical Studies with 5-Fluorouracil. Cancer Res. 18:478, 1958 (Figs. 1-9)

[5]Farber, S.; Diamond, L. K.; Mercer, R. D.; Sylvester, R. F., Jr.; and Wolff, J. A.: Temporary Remissions in Acute Leukemia in Children Produced by Folic Acid Antagonist, 4-Aminopteroylglutamic Acid (Aminopterin). N. Engl. J. Med. 238:787, 1948

[6]Colsky, J.; Escher, G. C.; Evans, A.; Mitus, A.; Li, M. C.; Roath, S.; Sullivan, R. D.; Sykes, M. P.; and Tan, C. T. C.: Preliminary Clinical Pharmacology of Mitomycin C. Proc. Am. Assn. Cancer Res. 3:13, 1959

[7]Hackenthal, C. A.; Golbey, R. B.; Tan, C. T. C.; Karnofsky, D. A.; and Burchenal, J. H.: Clinical Observations on the Effects of Streptonigrin in Patients with Neoplastic Diseases. Antibiot. & Chemotherapy (In press)

[8]Klopp, C. T.; Alford, T. C.; Bateman, J.; Berry, G. N.; and Winship, T.: Fractionated Intra-arterial Cancer; Chemotherapy with Methylbis Amine Hydrochloride; Preliminary Report. Ann. Surg. 132:811, 1950

[9]Krakoff, I. H.; and Sullivan, R. D.: Intra-arterial Nitrogen Mustard in Treatment of Pelvic Cancer. Ann. Int. Med. 48:839, 1958

[10]Sullivan, R. D.; Jones, R., Jr.; Schnabel, T. G., Jr.; and Shorey, J. M.: Treatment of Human Cancer with Intra-arterial Nitrogen Mustard (Methylbis 2-Chlorethyl Amine Hydrochloride) Utilizing Simplified Catheter Technique. Cancer 6:121, 1953

[11]Magill, G. B.; Myers, W. P. L.; Reilly, H. C.; Putnam, R. C.; Magill, J. W.; Sykes, M. P.; Escher, G. C.; Karnofsky, D. A.; and Burchenal, J. H.: Pharmacological and Initial Therapeutic Observations on 6-Diazo-5-Oxo-L-Norleucine (DON) in Human Neoplastic Disease. Cancer 10:1138, 1957

[12]Hartman, S. C.; Levenberg, B.; and Buchanan, J. M.: Involvement of ATP, 5-Phosphoribosylpyrophosamide and L-Azaserine in Enzymatic Formation of Glycinamide Ribotide Intermediates in Inosinic Acid Biosynthesis. J. Am. Chem. Soc. 77:501, 1955

[13]Heidelberger, C.; Chaudhuri, N. K.; Danneberg, P.; Mooren, D.; Griesbach, L.; Duschinsky, R.; Schnitzer, R. J.; Pleven, E.; and Scheiner, J.: Fluorinated Pyrimidines, New Class of Tumour-inhibitory Compounds. Nature, London, 179:663, 1957

[14]Skipper, H. E.; Bennett, L. L., Jr.; and Schabel, F. M., Jr.: Mechanism of Action of Azaserine. Fed. Proc. 13:298, 1954

[15]Sullivan, R. D.: Unpublished data

[16]Miner, R. D., Editor: 6-Mercaptopurine. Ann. New York Acad. Sc. 60:183, 1954

[17]Burchenal, J. H.; and Kingsley-Pillers, E. M.: Studies on Amethopterin, Citrovorum Factor, and Crude x-Methyl Folic Acid in Leukemia. (Abstract) J. Clin. Invest. 30:631, 1951

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[18]Murphy, M. L.; Ellison, R. R.; Karnofsky, D. A.; and Burchenal, J. H.: Clinical Effects of Dicloro and Monochloro-phenyl Analogues of Diamino Pyrimidine: Antagonists of Folic Acid. J. Clin. Invest. 33:1388, 1954

[19]Sullivan, R. D.; Miller, E.; and Sykes, M. P.: Antimetabolite-Metabolite Combination Cancer Chemotherapy. Effects of Intra-arterial Methotrexate-Intramuscular Citrovorum Factor Therapy in Human Cancer. Cancer 12:1248, 1959

[20]Sullivan, R. D.; Miller, E.; Wood, A. M.; Clifford, P.; Duff, J. K.; Trussell, R.; and Burchenal, J. H.: Continuous Infusion Cancer Chemotherapy in Humans—Effects of Therapy with Intra-arterial Methotrexate plus Intermittent Intramuscular Citrovorum Factor. Cancer Chemotherapy Reports 10:39, 1960

[21]Sullivan, R. D.; Wood, A. M.; Clifford, P.; Duff, J. K.; Trussell, R.; Burchenal, J. H.; and Nary, D. J.: Continuous Intra-arterial Methotrexate-Intermittent Intramuscular Citrovorum Factor Therapy in Carcinoma of the Cervix. Cancer Chemotherapy Reports 8:1, 1960

[22]Creech, O.; Ryan, R. F.; and Winblad, J. N.: Regional Perfusion Utilizing an Extracorporeal Circuit. Ann. Surg. 148:616, 1958

[23]Miller, E.; Sullivan, R.; Young, C.; and Burchenal, J. H.: Clinical Effects of the Continuous Infusion of Antimetabolites — Prevention of Toxicity of 5-Fluoro-2'-Deoxyuridine by Thymidine. Proc. Am. Assn. Cancer Res. 3:251, 1961 (Abstract #192)

[24]Liguori, V. R.; Giglio, J. J.; Miller, E.; and Sullivan, R. D.: The Effects of Different Dosage Schedules of Methotrexate on Sera and Tissue Levels and Urinary Excretion Patterns (In press)

CARDIAC ARREST

concluded from page 580

utilized this technique in the laboratory and in a number of clinical cases. We are now convinced that the closed chest cardiac massage is as effective as the open technique.

References

[1]Lahey, F. H.; and Ruzicka, E. R.: Experience with Cardiac Arrest. Surg. Gynec. & Obst. 90:108, 1950

[2]Turk, L. N., III; and Glenn, W. W. L.: Cardiac Arrest. New England J. Med. 251:795, 1954

[3]Briggs, B. D.; Sheldon, D. B.; and Beecher, H. K.: Cardiac Arrest. J.A.M.A. 160:17, 1956

[4]West, J. P.: Cardiac Arrest During Anesthesia and Surgery. Ann. Surg. 140:623, 1954

[5]Beck, C. S.: Resuscitation in Cardiac Arrest. S. Clin. North America 36:247-248, 1956

[6]Stephenson, H. E., Jr.: Cardiac Arrest and Resuscitation. St. Louis 1958, C. V. Mosby Co., page 32

[7]Effler, D. B.; and Sifers, E. C.: Cardiac Arrest. Cleveland Clin. Quart. 19:194, 1952

[8]Stephenson, H. E., Jr.; Reid, L. C.; and Hinton, J. W.: Some Common Denominators in 1200 Cases of Cardiac Arrest. Ann. Surg. 137:731, 1953

[9]Dinsmore, R. S.: Discussion of Johnson, J., and Kirby, C. K.: Ann. Surg. 134:672, 1951

[10]Kouwenhoven, W. B.; Jude, R. J.; and Knickerbocker, G. G.: Closed Chest Cardiac Massage. J.A.M.A., July 9, 1960, 1064-1067

The Socialists Believe Federal Medical Aid is Socialist

EXTENSION OF REMARKS
of
HON. BRUCE ALGER
of Texas

In the House of Representatives

Wednesday, August 9, 1961

Mr. ALGER. Mr. Speaker, for those who claim that we who oppose federal medical aid unfairly term it socialistic, I call attention to an editorial, which I include herewith, from the *Wall Street Journal:*

Good for a Laugh

Some of our best friends are Socialists. In fact, they're shouting Socialists with whom we've broken many an argumentative lance. But the clash of convictions is good-natured; we always agree that socialism is what we're talking about, whatever name it may go by in the political marketplace.

Just the other evening, we were discussing "socialized medicine." Our friends didn't flinch at the phrase. No, it was agreed that once the government began taking care of the health of some of the people, political pressure ultimately would require the government to minister to all the people. Anything short of that would be rank social injustice.

In the course of our amicable debate, it was decided that the essential elements of socialized medicine (or whatever polite name the politicians gave it in the beginning) would be compulsory coverage, regardless of individual wish or need, and necessary government control of the huge outlays of public money required by such broad coverage. Sooner or later, the government would have to supervise hospitals, nursing homes and medical practitioners — anything and anybody handling the public business.

There was a footnote to our argument a couple of days later, when one of our friends called to ask if we'd seen what Welfare Secretary Ribicoff had said in Washington. Testifying in behalf of the administration's plan to provide medical care for 14 million elderly Americans under social security, Mr. Ribicoff was hotly indignant that anyone should call the scheme "socialized medicine."

Why, the secretary said, he personally had reviewed the plan and removed "all the elements which could be called socialistic." It gave our Socialist friend a good laugh.

, . . . CONGRESSIONAL RECORD, August 9, 1961

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Editorials

II. HYPOCRISY IN THE DAILY PRESS

In the issue of September 24, 1961, The Providence Sunday Journal stated editorially: "Testimony before a Senate Committee by Abraham A. Ribicoff, secretary of Health, Education, and Welfare, places the Kennedy administration squarely in support of the pending measures to control the promotion and sale of drugs. Mr. Ribicoff stated it bluntly: 'The time has come,' he said, 'to give American men, women and children the same protection we have been giving hogs, sheep and cattle since 1913.'" The editorial then piously concludes: "The Kefauver Bill promises to clear up a muddy situation, eliminate some gross abuses in the sale of drugs, and give the public a measure of protection which is not only desirable but necessary."

This editorial comment appeared on page 37 of the news section. On page 41 of the same issue we found the following: "Get Fast Relief from the Itching and Burning of Hemorrhoids . . . contains an anaesthetic that *goes to work quickly* to relieve itching and burning . . . other medically effective agents help decongest annoying hemorrhoids, while promoting natural healing of irritated tissues," and so forth. There are other examples in the same issue. On page 13 of the television section (television listeners appear to be peculiarly vulnerable): "Lemon Juice Recipe Checks Rheumatic and Arthritis Pain. If you suffer rheumatic, arthritis, or neuritis pain, try this simple inexpensive home recipe that thousands are using. . . ." On page 4 of *The Rhode Islander*: "Protect Your Heart! . . . Wheat Germ Oil Helps Heart Action. Improves Strength, Vigor. . . ." On page 11 of the same section: "Arthritis, Rheumatism, Muscular Pains. Maybe you've tried just about everything to relieve such pains without luck. But have you tried . . . ? There's nothing in the world that's faster, safer, better for nagging moderate arthritis, Rheumatism or Muscle Pains. . . ." On page 28 of *This Week Magazine*: "Pain, Pain, Go Away! Try . . . for symptom relief in temporary painful conditions. When? In pain of menstrual distress, simple headaches, neuralgia, neuritis, temporary relief of minor aches of arthritis and rheumatism. How? Special formula reduces pain, fever. . . ." On the same page: "Live Your 'Golden Years' Without Laxatives. Growing older doesn't mean you *have* to take laxatives. . . . Take new. . . ." On page 31 of the same: ". . . are reducing aid wafers which supply bulk, the food substance that most dieters need but can't get from 900-calorie liquids alone. . . ." And on page 35: "Get to the Root of Athlete's Foot, Ringworm, Other Infections With New . . . and that fungus is dead forever! . . ." These, mind you, are all from *one* issue of The Providence Sunday Journal.

It is difficult for us to believe that the editors and publishers of these papers are so naïve as to believe that advertising of this nature constitutes a public service. Can it be that the advertising revenue is a factor? The writer's late father used to say wryly: "It isn't the principle of the thing; it's the money." But perish the thought! Surely some day these crusading newspapers may see fit to "give the public a measure of protection which is not only desirable but necessary."

BLUE CROSS–PHYSICIANS SERVICE STATES ITS CASE

On September 20, 1961, it was announced that the hearings before Mr. Harold C. Arcaro, Rhode Island State Director of Business Regulation, concerning proposed Blue Cross and Physicians Service rate increases had been recessed until October 17. As of this writing it is the intention of Blue Cross to present "some modifications" which might be considered "more acceptable." Before these columns are read, the hearings will have been resumed. We trust that the proceedings will not have been used to harass the "Blue" plans for the purpose of seeking political advantage. We commend their officers and administrators for the dignified conduct and co-operative spirit which they have manifested under rather considerable and largely unwarranted pressure.

We particularly wish to extend our compliments to Mr. Arthur F. Hanley, assistant director of Blue

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Cross and Physicians Service, for the excellent statement which he presented at the start of the hearings. This "Statement in Support of Rate Changes" is a 62-page document outlining under various headings the history, development, future, and problems of Blue Cross and Physicians Service. The narrative and the arguments are lucid, logical, and complete. The reasoning is sound, and the documentation thorough. In the conclusion of his statement, Mr. Hanley quotes certain remarks made by the superintendent of Insurance of the State of New York which are pertinent to the present inquiry: "Unless the State is going to run Blue Cross (and Blue Shield)—and I assure you that for this purpose a far more elaborate apparatus would be required than now exists in any State agency—management of the Blue Cross Plans must retain freedom to manage their operations. . . . The law lays upon the superintendent of Insurance the responsibility of approving applications for Blue Cross subscriber rate increases unless the rates are excessive or unfairly discriminatory. . . . These legal requirements, or even assuming the law were amended so as to change the aforesaid criteria, the denial of needed rate relief to a Blue Cross Plan would be an irresponsible pretense of 'protecting' the public." The truth of these words is self-evident. It is too bad that they are so often obscured by a political smokescreen.

FIRST SESQUICENTENNIAL EVENT MAJOR SUCCESS

THE FIRST of the community programs sponsored by the Rhode Island Medical Society in celebration of its 150 years of service was by all standards a major success. On September 10, at Providence College, approximately 125 athletic coaches and trainers representing all the major secondary public and private schools in the state were treated to an outstanding educational program on the prevention and the treatment of athletic injuries, the entire Conference carried out under the sponsorship of our Society.

In spite of the fact that the day was one of the hottest September days on record, the audience remained in continuous attendance from early afternoon until well into the evening hours as physicians from our Society joined outstanding therapists (including the head trainer of our Olympic teams at Melbourne and at Rome) to learn effective ways to eliminate injuries to boys engaging in competitive athletics at the high school level.

Marking as it did the first complete presentation of the problem of injury prevention to the high school athletic personnel of the state, the Conference was of tremendous value to every school, and thereby every community. The leadership of the state medical society, and of the committee on the prevention and the treatment of athletic injuries, warrants highest commendation from every physician. The success of this Conference augurs well for the future events which will climax with the *Exposition of Health Progress* next April to which the entire citizenry of Rhode Island is to be invited, and our 151st annual meeting to be held at the Brown University gymnasium.

Prompt attention to the special assessment made this month by the Society on every member to defray the costs of the Sesquicentennial celebration will be the best evidence of the support of the entire medical profession of the public service programs the Society is undertaking in recognition of its 150th year of operation.

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TEAMWORK IN THE MANAGEMENT OF CHRONICALLY ILL HOUSEWIVES

GEORGE F. MOORE, JR.

The Author. *George F. Moore, Jr., of Smithfield, Rhode Island. Chief, Rhode Island Division of Vocational Rehabilitation.*

NEW METHODS AND SERVICES to help chronically ill and disabled wives and mothers to resume their homemaking and child care responsibilities are being provided through joint collaboration of Newport Hospital, the State Division of Vocational Rehabilitation, and the University of Rhode Island Extension service. The program, which was initiated this spring, is a team effort to identify adjustment problems in the homes of women patients that may be worked upon through the pooled efforts of several professional groups and while the patients are still in the hospital. These professions include a physician, social worker, nurse, physical therapist, home economist, and a specially trained vocational rehabilitation counselor.

As examples of the program's operation the rehabilitation team may provide a plan by which a mother who has suffered a stroke and has lost considerable use of one arm can bathe her infant, hang clothes out to dry, or prepare a meal. It may make it possible for a mother confined to a wheelchair to lift her baby from the crib and dress him.

Patients are referred to the program by their physicians and are given a thorough evaluation of their total needs by the team. This includes medical appraisal and prescription of treatment and therapy programs, nursing services, social work (when there are family problems which interfere with the adjustment of women patients to their homemaking duties), and a co-ordinated approach on the part of the home economist and the vocational rehabilitation counselor in planning and applying work simplification methods to aid in the patients' readjustment.

A facet of the vocational rehabilitation counselor's role is to act in part as a teacher with the other team members and particularly the home economist. The rehabilitation counselor works with the patient towards the elimination or modification of work routines in the home which present particular difficulties to the handicapped homemaker. The counselor suggests adaptation of home equipment to save energy and time and also assists in identifying jobs in the homemaking situation which can be assumed by other members of the family.

The following case histories serve to illustrate the problems of disabled wives and mothers and the methods employed in the Newport program which ease patients into their homemaking situations.

A forty-four-year-old mother of three school-aged children, who had suffered a cerebral thrombosis in January of this year, upon admission was diagnosed as having arteriosclerotic heart disease with fibrillation and tachycardia, with some disablement as a result of right hemiplegia. During the patient's hospitalization, intensive physical therapy was provided and considerable functional improvement of both arm and leg was accomplished.

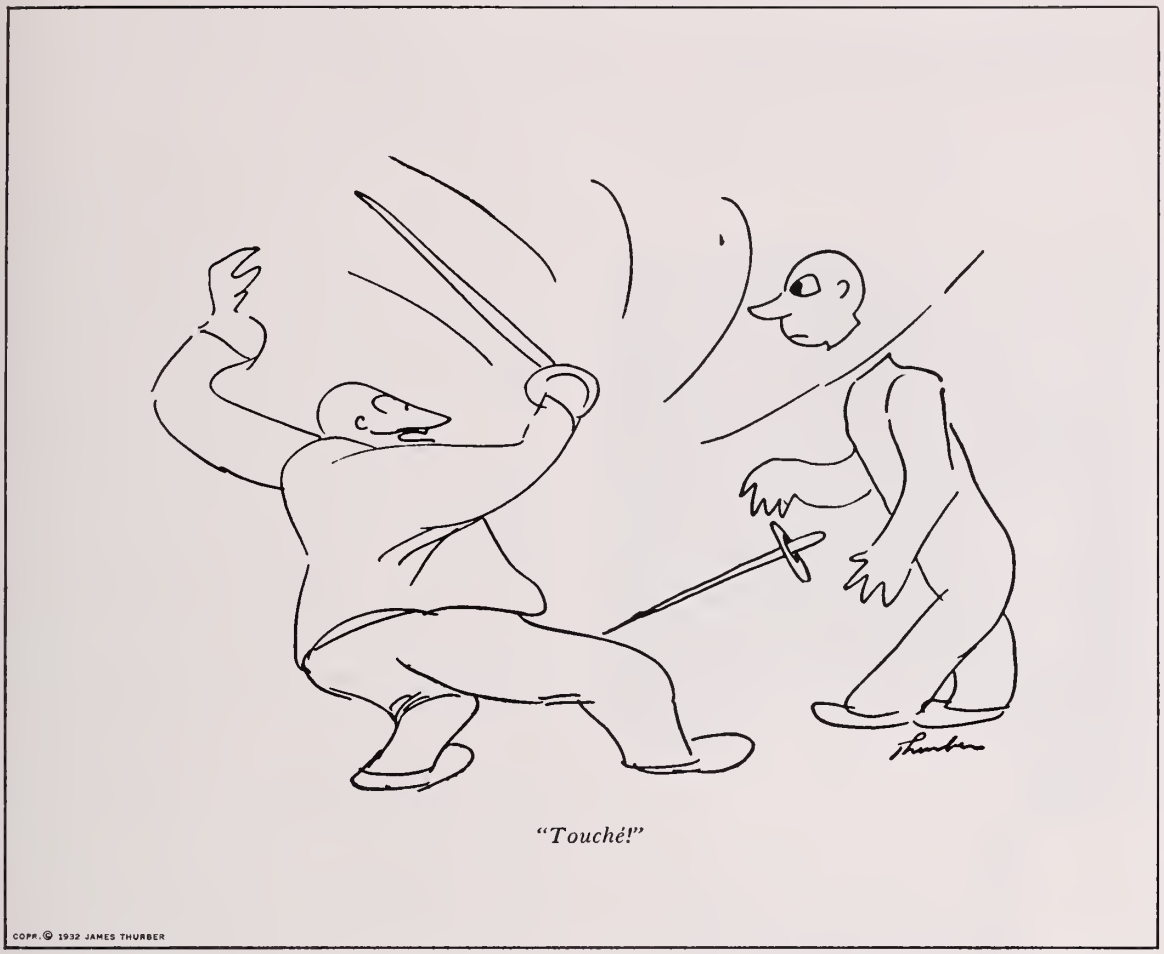
Following this the hospital team determined that the woman could return to her household duties provided that her three children assume the greater share of responsibility toward themselves and their home. The plan to accomplish this was worked out through numerous contacts by the vocational rehabilitation counselor with the children.

As part of the general home management planning, an adjustable ironing board and chair were purchased by the Vocational Rehabilitation Division along with an electric broom suitable for the client's small stature and limited strength. Instruction in the use of this equipment was given and following the patient's discharge, it was determined that she was able to cope with her homemaking responsibilities without overtaxing her strength and with minimal risk of future debilitation and hospital readmission.

A second mother, who had been crippled by poliomyelitis as a child, and who had suffered from generalized rheumatoid arthritis for the past ten years, received a similar total evaluation of her condition. She was provided physical therapy to improve motion in joints and the Division of Vocational Rehabilitation purchased several items of household equipment, including grab bars and an adjustable ironing board. She then was able to return to her home with a greater potential for her homemaking duties and the care of her four young children.

In addition this woman, who had briefly attended art school prior to her marriage, is being furnished by the Division of Vocational Rehabilitation a course in arts and crafts with the hope that these

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TEAMWORK IN THE MANAGEMENT OF CHRONICALLY ILL HOUSEWIVES

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activities will enable her to supplement the marginal family income through the sale of articles she designs and creates.

Another woman, a sixty-five-year-old widow whose physician diagnosed her condition as osteochondritis, generalized, with marked destruction of the left knee, was admitted to Newport Hospital following an arthrotomy and removal of semilunar cartilages and osteophytes from the knee. A patelloplasty had also been done. Postoperative care called for a rehabilitation program of physical therapy with massage and quadriceps exercises. Because the patient was without Blue Cross and Physicians Service coverage, the Division of Vocational Rehabilitation underwrote the full cost of her hospital care program. Special shoes with sole and heel lifts were purchased by the Vocational Rehabilitation Division. The client's posture improved, and walking and standing problems were lessened.

In concert with the home economist the rehabilitation counselor planned rearrangement of the patient's kitchen. A refrigerator, kept in the hallway, was moved into the kitchen for better accessibility. A rail at the top of the stairs leading into the woman's apartment was constructed. In addition, and with assistance of students of the Rogers High School woodworking class, needed shelves and counter space and racks for cupboard doors were installed. Arrangements were made to have a telephone pole, that was to be removed by the Newport Electric Company, set up in the patient's yard so that it could serve as an upstairs clothesline. This eliminated the hazard and strain of negotiating a difficult flight of stairs into a yard that was often damp.

Not all of the women patients who have been treated in the special Newport rehabilitation program are as successfully restored to their homemaking functions. Problems of motivation, long-term debilitation, and the multiple handicaps which so often burden chronic disease patients sometimes interfere with the dedicated efforts of the team to restore them to independent and productive living. Results so far, however, indicate that a majority of homemakers can be substantially helped by the program. When it is considered that the average disabled homemaker is usually more isolated from the world outside than the male rehabilitation client, less likely to receive the help of the various health and social agencies in the community, and frequently faces overwhelming frustration in meeting the daily demands of a job she is not able to handle, the results of the new rehabilitation program so far constitute a giant step forward in community planning and organization to meet her needs.

CLICHÉS OF SOCIALISM

"I'm a middle-of-the-roader."

ARISTOTLE, some twenty-three centuries ago, developed the idea of the middle way or, as he thought of it, "the golden mean." He used the term to describe certain virtues which consist of an intelligent moderation between the extremes of two opposite vices.

One concludes from his reflections that *courage* lies midway between cowardice and rashness; *liberality* between stinginess and extravagance; *ambition* between sloth and greed; *modesty* between the Milquetoast type of humility and the strutting dictator's kind of pride; *frankness* between secrecy and loquacity; *friendship* between quarrelsomeness and flattery; *good humor* between moroseness and buffoonery; *self-control* between indecisiveness and impulsiveness.

A century or so later the idea was given a perverse twist in *Ecclesiastes*—descending perilously close to the modern view.

> *"In my vain life I have seen everything; there is a righteous man who perishes in his righteousness, and there is a wicked man who prolongs life in his evil-doing. Be not righteous overmuch, and do not make yourself overwise; why should you destroy yourself? Be not wicked overmuch, neither be a fool; why should you die before your time?"*

In the twelfth century the eminent rabbi, Maimonides — again on the high road — was counseling his followers to choose the golden mean. His middle way, like Aristotle's, was that ideal route which leads between two extremes of opposite vices.

In our day, "middle-of-the-road" is more an excuse for intellectual sloppiness than a guide to moral discipline. There is nothing golden about it and it does not qualify as a mean. For instance, there is no middle way, as George Schwartz put it, between monogamy and polygamy. Nor is there any golden mean that can be derived from subdividing a single vice. Halfway between the theft of a small amount and the theft of a large amount is robbery all the way, no matter how you slice it!

In the jargon of our times, "I'm a middle-of-the-roader," has only political connotations. It means, when the drift is socialistic, that its advocates waver midway between a modicum of socialism and whatever extreme of socialism happens to be in popular favor. Thus, the middle-of-the-roader always finds himself wherever the currents of opinion dictate; he has no other basis for judging where his stand should be. The more extreme the socialistic view, the deeper will he be engulfed in socialism.

Quite obviously, there is no virtue in being a political middle-of-the-roader. This position sounds something like the golden mean, but there the resemblance ends. What we have is a confusion of sound with sense. The former is not even a reasonable facsimile of the latter. Middle-of-the-roadism is but a platitudinous position riding inexcusably on the reputation of a splendid philosophical conviction.

LEONARD E. READ

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MEDICINE IN THE ORIENT

OBSERVATIONS BY LAURENCE A. SENSEMAN, M.D. of Lincoln, Rhode Island

SUMMER SESSIONS or institutes for scientific study for the prevention of alcoholism are now being held in various leading cities of the world. They are sponsored by National Committees for the Prevention of Alcoholism in the various countries, including the United States. It has been my privilege in the past five years to lecture about our Rhode Island state program of the Division of Alcohol at the American University in Washington, D.C., the Loma Linda University in Los Angeles, California, and the University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

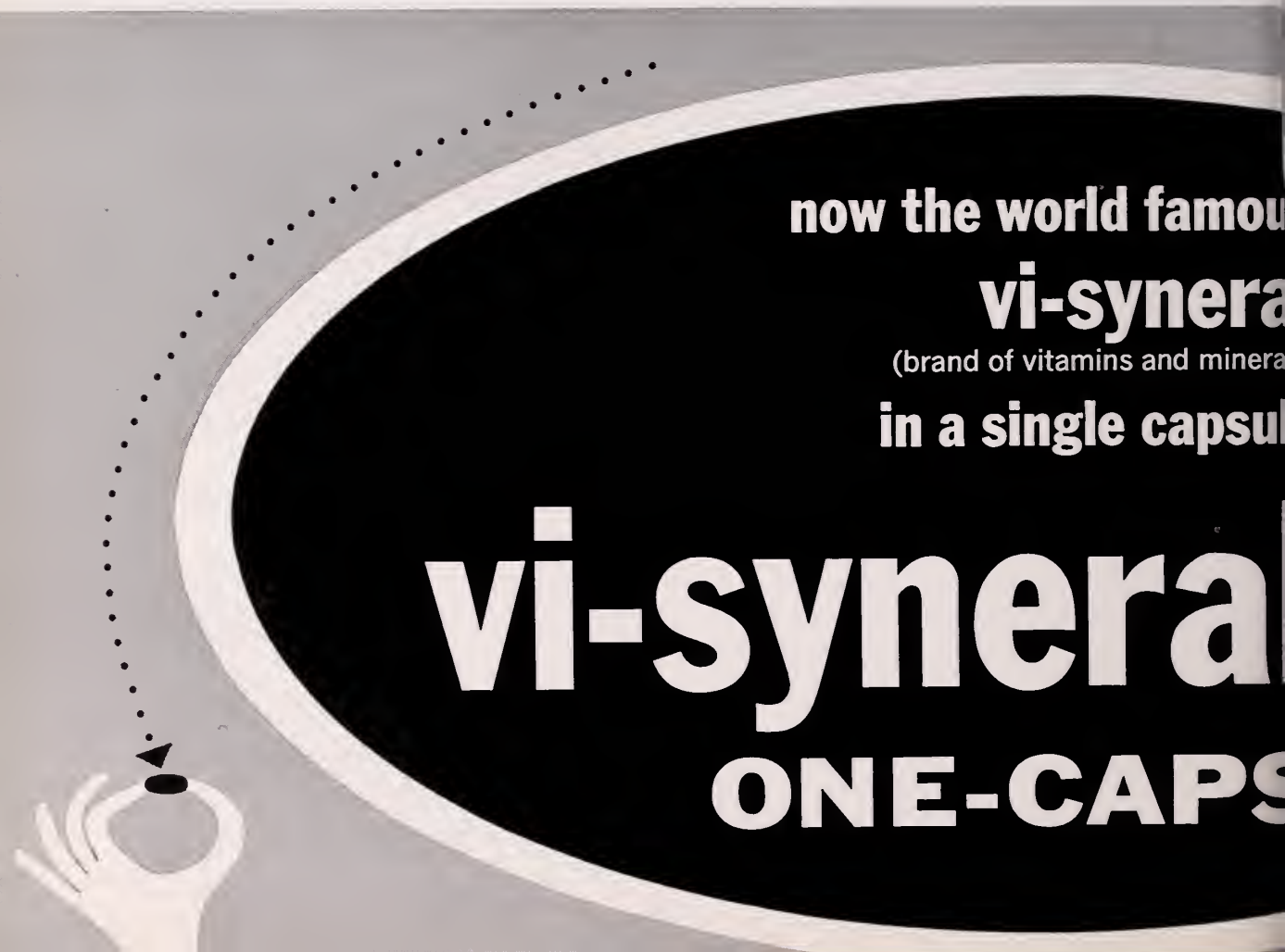
This past April, I was invited to lecture on this subject in the Philippines by the chairman of the National Committee for the Prevention of Alcoholism for the Philippines, General Basilio Valdes. Doctor Valdes was formerly surgeon-general of the Philippine Islands and former chief of staff under General Douglas MacArthur during World War II. I substituted for Doctor Andrew C. Ivy of the University of Illinois and gave six basic lectures on alcoholism.

Manila is only twenty-two hours by jet from Boston with stops at Los Angeles, Honolulu, and Guam.

I received a cordial welcome in the Philippines and lectured to a class of about 80 students which included doctors, psychiatrists, teachers, law enforcement agents, ministers, social service workers, and others interested in the problem of alcoholism.

My lectures were: (1) Philosophical and Educational Background on the Prevention of Alcoholism, (2) Etiology of Alcoholism, (3) Physiology and Pharmacology of Alcohol, (4) Definition of Terms of the Problems Created by the Consumption of Alcoholic Beverages, (5) Alcohol and Human Tissues, and (6) Rhode Island Division of Alcohol.

I visited the only public mental hospital in the Philippines, the National Mental Hospital in Manila. This large institution has a bed capacity for 2,000. The census the day I was there was over



6,200 patients! The best building on the extensive grounds would compare to a third rate U.S. Mental Hospital. The largest part of the hospital was unbelievably primitive. Beds were narrow wooden benches, and many slept out of doors on the ground on mats. Food was served on tin plates without any eating utensils. I was shown about this hospital by Doctor Rodriques, medical superintendent, who told me the future plan is for building several smaller mental hospitals in various places about the Philippines. No further large mental hospitals are planned.

Their method of treatment in the better part of the hospital is similar to any other mental hospital, but they are limited in equipment and the newer pharmaceuticals. Psychotherapy seemed nonexistent due to lack of trained personnel. The largest part of this hospital provided only primitive custodial care. Much professional help is needed to raise the standard of treatment and care in this hospital. Public apathy and lack of sufficient funds are deterrents to any degree of progress.

Doctor Gumersinds Garcia, director of Mental Health in the Philippine Islands, was most cordial. He is vice-chairman of the National Committee for the Prevention of Alcoholism. I visited him in the Mental Health Headquarters in Quezon City. They have a number of clinics in and about Manila and have plans for future growth in the Philippine Islands. The Mary Johnson Hospital (Methodist) of which Doctor Garcia is the medical director is a modern, up-to-date general hospital. The Manila Sanitarium and hospital (Seventh-day Adventist), a 142-bed institution, is conducting an energetic program of training for interns and residents. Both of these hospitals are operated by religious denominations from the United States.

Doctor Garcia and I met with the president of the University of the Philippines in his office on the large campus. It was a pleasant occasion and enjoyable, as the Filipinos appreciate the generosity the United States has extended toward them and visitors are made to feel important and welcome.

A visit to Corregidor was arranged by General Valdes and a Philippine gunboat took us to this historic spot, 26 miles from Manila in Manila Bay. A Marine bus and guide took our party to places of interest on the island, a never to be forgotten experience. The island is no longer a fortress, but a bleak jungle, which covers the evidence of the terrific struggle that took place here.

From Manila to Hong Kong is only a few hours by Viscount turbo-prop plane. This beautiful city is

concluded on next page



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full of contrasts that interest visitors. The Occident and Orient are blended into a melting pot of poverty and riches. This too is the window of Red China, so menacing in the distant horizon of mountains.

I spent three memorable days in Hong Kong, then on to Taipeh, Formosa, or Taiwan. I visited a private psychiatric hospital, Huh Chiang Mental Hospital, with Doctor Bernard Shao-liau Lui. While this was a small institution I felt it was doing a good work and representative of the area. One of the staff had trained in Philadelphia. Modern concepts of psychiatry were being utilized. This institution seemed well conducted, the patients seemingly receiving adequate care. The psychiatric staff also taught psychiatry and had an active service in the Taiwan Sanitarium and Hospital, a modern five-year-old hospital with 120 beds operated by a religious group (Seventh-day Adventist) from the United States. A personal friend was in charge of the medical service. They admitted 2,750 patients in 1960 with more than 43,000 out-patient visits.

The Island population seems to be marking time, impatient to get back to the mainland of China. Soldiers seem to be everywhere with slogans exhorting greater effort to hasten their return to China. From the air this verdant island shows evidence of battle readiness.

Tokyo, by Electra Jet, was a four- and one-half hour trip. This huge city seems western and modern but still the signs betray its oriental flavor. From the huge Tokyo tower, similar in construction to the Eiffel Tower in Paris, one gets a wonderful view of this sprawling city and Mount Fuji in the distance.

A trip on the electric trains is not hard if you know just where you are going and if you can find some one who can speak English! The trains are very prompt, and the crowds at Tokyo Central Station seem like those of Times Square in New York. Sight-seeing plus one talk to the student body of the Japan Union College filled my three and one-half days in Japan.

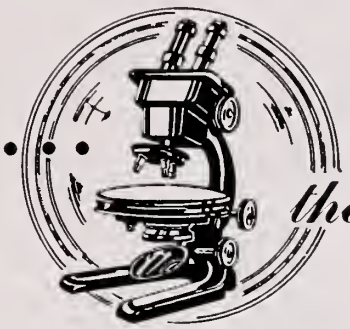
Nikko, a Shinto Shrine of the emperor, is a tourist attraction and a photographer's paradise. To the psychiatrist the three monkeys—see no evil, hear no evil, speak no evil—made famous by this shrine are particularly significant.

Exciting, indeed, is the return trip. The Pan American Jet flight No. 2 to Honolulu left at 12:00 midnight, Saturday. Doctor Maurice Silver, formerly of Providence, met our plane at the airport. He is at present with the large Kaiser Hospital on the Island of Oahu. The continuing flight after the two-hour stopover landed in Los Angeles at 9:30 P.M. Saturday night, two- and one-half hours before it left Tokyo thanks to the international date line and a loss of one day by flying east.



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"Flu" Cycle Threat Cause for Vaccination Program

Doctor Joseph E. Cannon, state health director, has made an urgent plea for persons in the "special risk groups" to be vaccinated against influenza. The *special risk groups* are:

1. Persons with heart disease, lung disease, diabetes, and other chronic illnesses.
2. Persons over 65.
3. Pregnant women.

According to a statement issued by Doctor Luther L. Terry, surgeon general of the Public Health Service, an upswing in the influenza cycle is likely to hit this country during the fall and winter. Doctor Cannon said that in the past we have seen cases of paralytic polio which, in all probability, could have been prevented by adequate vaccination. Similarly, whenever we have had outbreaks of influenza, some of the deaths, we know, could have been prevented if the persons had been vaccinated.

Doctor Raymond F. McAteer, assistant director, local health services, is of the opinion that Rhode Island, like the rest of the country, will show an increase in the number of cases of influenza. He joins Doctor Cannon in urging the vaccination of the *special risk groups* beginning immediately, so that these people will be protected during the late fall and early winter months. For those persons who have never been vaccinated against influenza, they should get one shot now, followed by a second two months later. Those who have had the flu vaccine in the past should get a booster shot now.

Foreign Medical Graduates Increase in 1960-61

The number of foreign medical graduates in approved training programs increased by five per cent during 1960-61, the American Medical Association reported recently.

A temporary decrease had been expected due to the program initiated by the Educational Council for Foreign Medical Graduates (ECFMG) requiring that foreign interns and residents be tested to determine whether their education measured up to American standards, the highest in the world.

However, the annual report of the A.M.A. Council on Medical Education and Hospitals revealed that of 37,562 internships and residencies filled during 1960-61, there were 9,935 foreign medical graduates constituting 26 per cent of the total. In 1959-60, there were 37,784 filled internships and residencies, of which 9,457, or 25 per cent, were foreign graduates.

While the number of foreign residents increased by 1,270 in 1960-61, the number of foreign interns decreased by 792 compared with the previous year.

This is the first year since 1954-55 that foreign interns have comprised less than one third of all the foreign physicians in training and is undoubtedly attributable to the ECFMG certification program, the A.M.A. Council said.

"That this decrease is likely to be only temporary is suggested by the results of the April 4, 1961, Educational Council for Foreign Medical Graduates examination which showed that 1,673 candidates were certified directly from abroad," the report said. "If the same or a greater number is certified abroad as a result of the October, 1961, examination, then the previous numbers coming annually to this country for initial training as interns will be equaled or exceeded."

Although foreign physicians were in training in 46 states, the District of Columbia, Puerto Rico and the Canal Zone, nine states accounted for 72 per cent of the total. These were New York with 2,360 or 24 per cent, Ohio with 893 or 9 per cent, Massachusetts with 711 or 7 per cent, Illinois with 704 or 7 per cent, Pennsylvania with 684 or 7 per cent, Michigan with 499 or 5 per cent, New Jersey with 465 or 5 per cent, Maryland with 450 or 4 per cent, and Missouri with 402 or 4 per cent.

The largest single group of foreign physicians was 2,303 from the Philippine Islands.

As to the future, the report said:

"While it is fair to estimate that increasing numbers of properly qualified foreign trained physicians will be coming to this country annually, it is probable that the total on duty may decrease as the

continued on next page

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federal government branches responsible for administering the U.S. Information and Educational Exchange Act of 1948 implement the law more effectively regarding return of exchange students to their native lands upon completion of training. The present policy limits such training of physicians to five years."

The Council also reported on two recently inaugurated programs which are expected to shape the future pattern of both medical practice and the health care of the American public.

The first step was the formation of the Advisory Committee on Internships and Hospital Services. This group will "consider methods of producing a more appropriate balance between the number of approved internships and the number of available candidates." In addition, it will consider and make recommendations for "methods of providing competent professional assistance to hospital staffs other than by interns or residents." The committee's final report is due by June, 1962.

The second step is the formation of an Advisory Committee on Graduate Medical Education and Training to study the entire present-day pattern of graduate medical education, i.e., the internship and residency phase of a physician's training lasting from one to seven years.

The committee will make recommendations concerning the conduct of such training in the future in relation to the needs of the nation for physicians, the needs of the public for medical care, and developing patterns of medical practice.

National Poison Prevention Week Designated

Secretary Abraham Ribicoff has expressed the concurrence of the Department of Health, Education and Welfare "in the designation of the week of March 18, 1962, as National Poison Prevention Week." In a letter to Congressman Emanuel Celler, chairman of the House Judiciary Committee, Secretary Ribicoff noted that there were some 822,000 accidental ingestions of medicines, household products, cosmetics, poisonous plants and other nonedible materials, over 300,000 by children under five years of age. "Almost all of these could have been prevented. We believe that the designation of a National Poison Prevention Week with the concentration of attention from the press, radio, television and other media will bring some of these precautions to the attention of the public and will result in an appreciable reduction of accidental poisonings," explained the H.E.W. Secretary.

Increase in Hospital Expenditures

Americans are spending an increasing portion of their income on health services and this trend will continue, according to George Bugbee, president of the Health Information Foundation.

Writing in the September 1 issue of HOSPITALS,

Journal of the American Hospital Association, Mr. Bugbee reported that the annual expenditures for all types of medical care have risen from 3 billion dollars 30 years ago to 25 billion dollars today. During this period, he said, private expenditures for hospital care have risen from 400 million dollars to 5.5 billion dollars, representing approximately 30 cents of each dollar spent for medical care today.

He explained that the increase in hospital expenditures is in part due to an increase in the unit cost of a day of care, which has risen 340 per cent since 1940. "The unit cost of a day of care and the insurance coverage for hospitalization which reflect the increase are the fastest rising items in the medical price index," he said.

Future expenditures for medical care will inevitably be greatly affected by our expanding population which is expected to reach 235 million by 1975, Mr. Bugbee said, adding that the growing number of people over age 65 account for approximately nine per cent of the population.

The upward trend of chronic illness in later life will mean even greater expenditures for medical care, Mr. Bugbee asserted. A recent survey sponsored by the Health Information Foundation showed that 43 per cent of all families reported at least one member seeing a physician for a chronic condition; but this figure jumped to 69 per cent among families with medical expenditures of 1000 dollars or more in a given year.

Mr. Bugbee predicted a continued trend toward greater utilization of hospital facilities. He observed, "During my generation, the care of obstetrical patients has moved from home to hospital, and there is also a movement from home to hospital for the last days of life. Deaths in general hospitals have increased in the last 20 years from 34 to 48 per cent of all deaths."

Professional Schools Gain Broader Financial Support

A new program to provide a broader form of financial support to schools of medicine, dentistry, osteopathy, and public health has been announced by Doctor Luther L. Terry, surgeon general of the Public Health Service.

"The prime purpose of this program is to increase the capacity of the nation's research and educational institutions for carrying out their health-related research and research training," Doctor Terry said. "We believe it will meet the needs of these institutions for greater flexibility in the use of portions of the federal support funds they have been receiving."

Purpose of the grants is to provide general support on a continuing basis for research and research training activities. A distinguishing feature of the grants is the greater freedom the recipient institutions will have in determining the specific use of the

continued on next page

The Eighteenth Annual

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funds, as compared with other types of Public Health Service grants.

Doctor Terry said that funds for the support of research and research training projects by the National Institutes of Health have risen from a level of 3.5 million dollars in fiscal year 1947 to more than 400 million dollars in fiscal year 1961. For the most part these funds have been used for specific projects proposed by individual investigators.

"To some extent," he said, "this procedure has limited the autonomy of grantee institutions and investigators in controlling the character and direction of their health-related research and research-training activities.

"The new form of support will afford more freedom and enable the institutions to assume greater responsibility in carrying out their programs."

Legislation for the program is contained in Public Law 86-798, passed in September 1960.

Radioactive Fall-out from Russian Tests Noted

Evidence that radioactive fall-out from the Russian resumption of nuclear weapons testing is falling on the United States has been announced by Secretary Abraham Ribicoff of Health, Education, and Welfare.

The Public Health Service Arctic Health Research Center at Anchorage, Alaska, reported that preliminary analysis of air samples taken Tuesday, September 5, showed a radiation level of 7 micromicrocuries per cubic meter of air, 35 times the average daily levels of .2 micromicrocuries during August, said Secretary Ribicoff.

Doctor Luther L. Terry, surgeon general of the Public Health Service, said that no immediate health danger exists in the increased fall-out. He also said that, while he has no question of the fact that the sample shows fall-out from Russian weapons testing, as a matter of scientific practice the analysis will be rechecked.

"During the past three years, in the absence of atomic bomb testing in the atmosphere, the level of radioactive fall-out has gradually fallen," said Secretary Ribicoff. "But if these atmospheric tests are continued by the Soviet Union, the world faces again the threat of contamination of food, water and air."

Doctor Terry pointed out that the 7 micromicrocurie level reflected in the reading from the Alaskan test station is well below human tolerance levels and considerably lower than levels reported from Alaska on numerous occasions prior to the test moratorium in the fall of 1958.

The surgeon general also said that the Public Health Service has tightened all of its radiation



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surveillance, but a complete picture of the effect of the Russian testing will not be done for several months.

The 45 radiation stations that sample air and rain or snow (first indicators of fall-out) have been put on around-the-clock monitoring duty and asked to report within three hours any sample that shows a tenfold increase above average radiation levels. In ordinary practice, air and rain is monitored on an 8-hour, 5-day-a-week basis.

Thyroid Association Offers Prize for Essay on Goiter

The American Thyroid Association, Inc., again offers the Van Meter Prize Award of 500 dollars to the essayist submitting the best manuscript of original and unpublished work concerning *Goiter — especially its basic cause*. The studies so submitted may relate to any aspect of the thyroid gland in all of its functions in health and disease. The award will be made at the Annual Meeting of the Association at the Roosevelt Hotel, New Orleans, Louisiana, May 9-12, 1962.

The competing essays may cover either clinical or research investigations, should not exceed 3,000 words in length and must be presented in English. Duplicate, typewritten copies, double-spaced, should be sent to the secretary: THEODORE WINSHIP, M.D., 430 N. Michigan Ave., Chicago 11, Illinois, *not later than January 1, 1962*. The committee who will review the manuscripts is composed of men well qualified to judge the merits of the competing essays.

DID YOU KNOW?

- That a survey by the American Dental Association has shown that the average dentist in private practice has a 43-hour work week, but that three out of every eight dentists work more than a 45-hour week.
- That the 43 hours are divided among 34 hours at the dental chair, four hours doing laboratory work, two hours doing other office work, and three hours in free office time.
- That the average dentist takes a three-week vacation each year, but vacations vary by age, ranging from one-and-a-half weeks for dentists under 30, to more than five weeks for dentists over 70 years of age.
- That the average dentist has 1,184 patients who visit his office 3,130 times a year.
- That one out of every eight dental patients has a tooth extracted, and two out of 11 have X-rays.

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BOOK REVIEWS

CEREBRAL PALSY AND RELATED DISORDERS. A Developmental Approach to Dysfunction by Eric Denhoff, M.D. and Isabel Robinault, PH.D. McGraw-Hill Book Company, Inc., N.Y., 1960. $12.00

CEREBRAL PALSY AND RELATED DISORDERS is a book devoted to a subject as yet ill-defined. The authors begin their presentation in the opening chapter with a discussion of the nature of cerebral palsy and then, in a "newly developing concept," loosely categorize cerebral palsy and related disturbances under the broader term of *Syndromes of cerebral dysfunction.*

In order to have a clear idea of cerebral palsy, it is important to have a clear idea of the handicapped in general. These can be said to be of four types. First, motion or the motor handicapped including all forms of crippled children. A second group is made up of the sensory handicaps involving the special organs such as sight, hearing and sensation. The third group may have perfect ability to take in and gain information and knowledge as well as perfect ability to express this knowledge by motor response, but is unable to use the knowledge gained because of defects of the mind. This is the mentally handicapped. Finally, there is a large diffuse group of functional and organic handicaps including such disturbances as heart disease, lung disease, and the like. The causes of all these handicaps may be congenital or defective development, injury at or around the time of birth, or they may result from acquired postnatal injury or disease of many types.

Subsequent chapters review clinical descriptions of these syndromes, note trends in treatment in clinics and schools across the country specializing with these dysfunctions, and make an effort to clarify these syndromes with illustrative cases. Although orthopedists in the past have been especially concerned with cerebral palsy their general dissatisfaction with the problem and with the results obtained may be due to the fact that cerebral palsy is not strictly a motor handicap, but involves other fields of the handicapped. Slowly the team approach has evolved as a truly comprehensive developmental assessment to the patient's physical, mental, emotional and social needs from birth to maturity. The Meeting Street School in Providence, Rhode Island is used as the prototype of a clinic for young children run along these comprehensive lines. A neurologist would help to strengthen this team's comprehensive program and a chapter on the neurological examination in the newborn in the next edition will round out this well-written book.

The aims of treatment may vary widely, and the decision must be made both from the economic and individual viewpoint. Rehabilitation for some life work is the first consideration. When this is impossible then freeing the individual from the care of another becomes the goal. Diagnosis and treatment, the authors state, are dynamic and optimistic. Look for the hidden handicap, have a high index of suspicion and change the therapy as developmental maturity demands. With this in mind and with the elemental nature of our present knowledge of cerebral processes most literature concerned with these dysfunctions is valuable. CEREBRAL PALSY AND RELATED DISORDERS is no exception.

PETER L. MATHIEU, JR., M.D.

HANDBOOK OF PEDIATRICS by Henry K. Silver, M.D.; C. Henry Kempe, M.D. and Henry B. Bruyn, M.D. 4th ed. Lange Medical Publications, Los Altos, Calif., 1961. $3.50

The fourth edition of the HANDBOOK OF PEDIATRICS presents an easily available summary of diagnosis and treatment of diseases of children. It is of a convenient size which can be carried in the practicing physician's bag or the house officer's pocket. The handbook contains a concise summary of these diseases, which is intended to "supplement rather than to replace the more complete pediatric texts and reference works."

As a handbook I think it is excellent. I was particularly pleased with the chapters on emotional problems and adolescence. They are easy to read, and the problems are described in a brief, concise fashion. The handbook is particularly recommended to house officers.

ROBERT M. LORD, JR., M.D.

MAYO CLINIC DIET MANUAL by the Committee on Dietetics of the Mayo Clinic. 3rd ed. W. B. Saunders Co., Phil., 1961. $5.50

This is a very comprehensive manual, outlining many diets. The approximate composition of each

concluded on page 604

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BOOK REVIEWS

concluded from page 602

diet is analyzed in terms of adequacy of specific nutrients and recommendations for supplementation are made where necessary to meet the standards set by the National Research Council. Each diet is arranged to show the foods included, the foods excluded, the dietary pattern and a sample menu with weight in grams and household measure of each menu item.

Some of the dietary programs in this manual are controversial. Among them are calculation of diabetic diets by the gram method, high calcium content of the Standard Tube Feeding, presentation of The Ketogenic Diet for the epileptic child, and a relatively high fat allowance for gallbladder disorders.

Although this manual would have a limited use in the small hospital, its analyses and descriptions of diets and its directions for computation are excellent.

Louise S. Jenks
ADA Dietitian
Jane Brown Unit
Rhode Island Hospital

ATTI DEL III. CONVEGNO DELLA MARCA PER LA STORIA DELLA MEDICINA. Mario Santoro, editor. (Transactions of the 3rd meeting for the history of medicine) Sotto la Presidenza Onoraria di Adalberto Pazzini. Presidente del Comitato Promotore Mario Santoro. Fermo – Sede dell' Antica Universitá 24-25-26 Aprile 1959. La Rapida, Fermo, 1960. (In Italian)

Fermo is a town of about 15,000, on a hill, in central Italy, a few miles from the Adriatic coast. Its center of study, founded around 1000, is especially devoted to the history of medicine and pharmacology.

This de luxe edition of 250 copies is a fine example of printing and binding. The first volume of transactions appeared in 1955, the second in 1957. At the end of the book are listed the titles of the papers of the 1955 and 1957 editions.

Medical history is flourishing in Italy, particularly from the chairs of Rome (Pazzini), Bologna (Busacchi and Nardi), Ferrara (Münster), Perugia (Stroppiana).

Under the editorship of Mario Santoro, dean of the University of Fermo, the student of medical history will enjoy 44 tracts and among them studies on Leonardo, Garzoni, Rainaldi, Bacci, Dolens, Jasolini, Fioravanti, Angenio, on ancient hospitals, famous consultations, anatomical museums, early medical schools, on hydrotherapy in the Renaissance, anatomy, blood circulation, lithotomists and bonesetters, the slave market in Venice, and the court litigations when a diseased slave was sold as in perfect health.

Numerous plates illustrate manuscripts, title pages, anatomical drawings, medicinal plants, and old hospitals.

F. Ronchese, M.D.

REVIEW OF MEDICAL MICROBIOLOGY by Ernest Jawetz, M.D.; Joseph L. Melnick, PH.D. and Edward A. Adelberg, PH.D. 4th ed. Lange Medical Publications, Los Altos, Calif., 1960. $5.00

The fourth edition of Review of Medical Microbiology brings up-to-date information especially in the fields of virology and the use of antimicrobic drugs where concepts are changing continually with the accumulation of research data. The review stresses basic science information in the different groups of subject matter dealt with including bacteriology, mycology, virology, chemotherapy, and virology, and in this regard provides material especially useful to medical technology students and to physicians who are preparing for board examinations in the basic sciences. There is much useful information also for the medical student, the house officer and the practicing physician. Some points of criticism are evident. The illustrations are few and scattered, and with the exception of a few electron micrographs most of the other illustrations appear to be sketches or drawings rather than photographs of clinical material. There is no section of medical parasitology, which usually is included in the general subject of medical microbiology. Aside from a list of general reference books and journals at the end of the index, there are no references relating information in the text to the research literature. However, these deficiencies may relate to the edition being designed as a review and not a textbook and contribute to the low cost of the review. In spite of the shortcomings, the book should be very useful to the students and physicians for whom it is intended.

Raymond M. Young, PH.D.

Sesquicentennial Celebration Dates

SCIENTIFIC MEETING

May 8 and 9, 1962

Marvel Gymnasium, Brown University

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Medical Journal

Volume XLIV, No. 11

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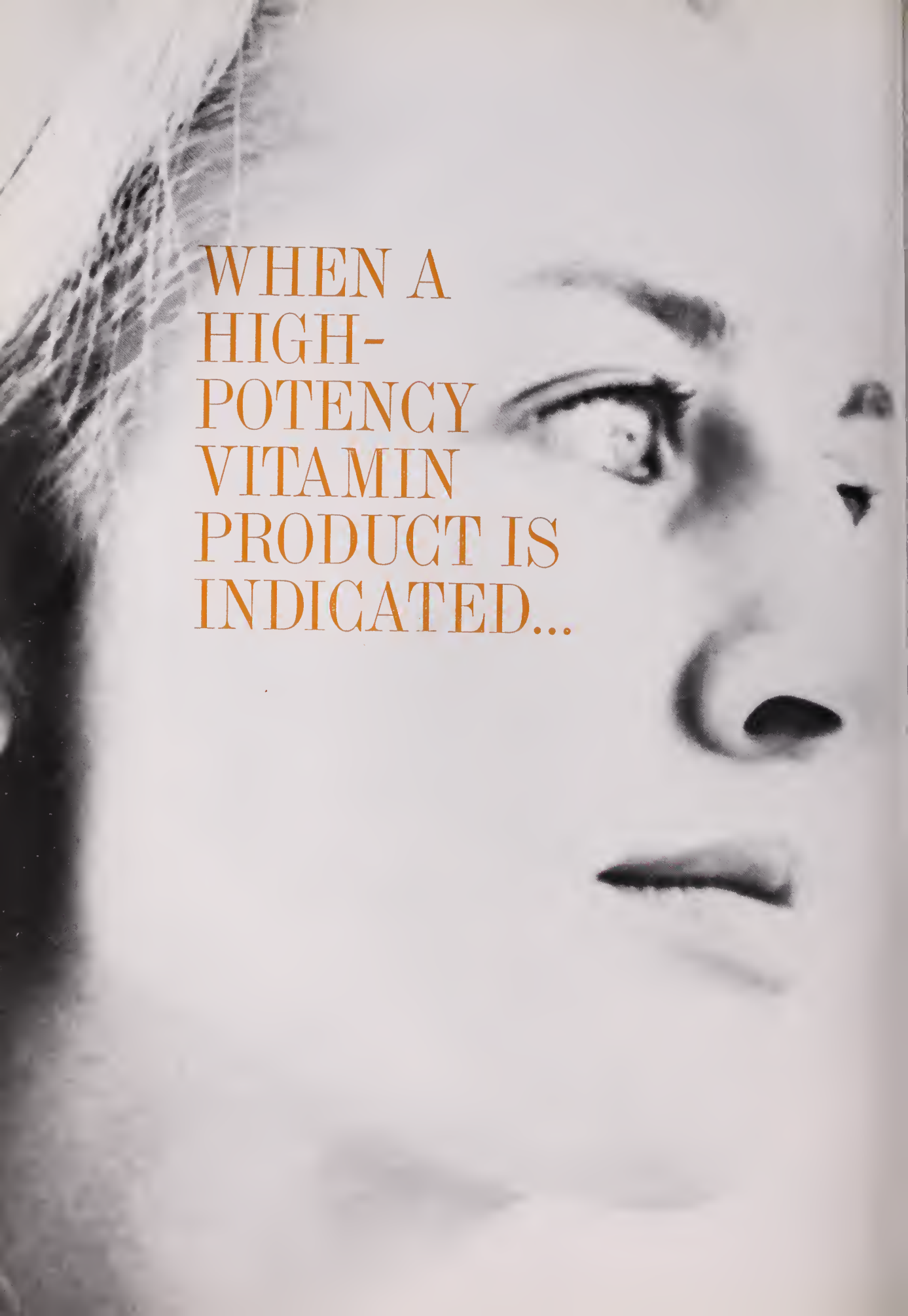
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1. Griffith, R. S.: Antibiotic Med. & Clin. Therapy, 7:129, 1960.

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1. Clinical reports to the Medical Department, Armour Pharmaceutical Company, 1960. 2. Billow, B. W., *et al.:* Southwestern Med. *41*:286, 1960. 3. Taub, S. J.: Clin. Med. *7*:2575, 1960. 4. Teitel, L. H., *et al.:* Indust. Med. *29*:150, 1960.

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DIVISION OF ALCOHOLISM
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October 11, 1961

To the Editor:

I want to take this opportunity to compliment you on the excellent editorial that appeared in the September issue of the RHODE ISLAND MEDICAL JOURNAL titled, *The Rhode Island State Division of Alcoholism.*

As chairman of the Advisory Council for the past ten years and, prior to that, chairman of the Commission for two years, it has been a real source of pride and pleasure to me that our Division has provided ten years of service to the alcoholic in Rhode Island.

This editorial was certainly informative and only inaccurate in a small detail and that is that Governor Pastore appointed the Commission that recommended the formation of the Division of Alcoholism.

Under the leadership of Doctor Capone, we are making progress and soon will have our permanent headquarters in the Butler Health Center.

Thank you again for honoring the Division of Alcoholism by your editorial.

Very truly yours,
LAURENCE A. SENSEMAN, M.D.
Chairman, Advisory Council

To the Editor:

I should like to express the thanks of the Department of Social Welfare and, more particularly, the thanks of the staff of the Rhode Island Division of Alcoholism for the editorial titled, *The Rhode Island State Division of Alcoholism,* which appeared in the October issue of the RHODE ISLAND MEDICAL JOURNAL. This editorial presented the facts about alcoholism in a very clear and appealing fashion.

We felt that you might be interested in further information about our Division. We are in the process of sending out pertinent information to all physicians in the state of Rhode Island. We are offering to act as consultants to any hospital in the state which admits alcoholic patients in the event they might present administrative or treatment problems. We will serve as consultants to any physician who is interested in or already working with alcoholic patients. We hope in the near future to present a program concerned with treatment of the alcoholic at one of the monthly meetings of the Providence Medical Association.

The Division of Alcoholism, as a state agency involved in the treatment of one of our major health problems, is ready to co-operate in any possible way with the medical profession in our state. Literature is available upon request from the Division. There is also available without charge to physicians, a pamphlet MANUAL ON ALCOHOLISM by the Council on Mental Health, American Medical Association, 535 Dearborn Street, Chicago 10, Illinois.

ANTONIO CAPONE, M.D., *Administrator*
Division of Alcoholism
Department of Social Welfare

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TUES., DEC. 12 — HEALTH IN THE WINTER

TUES., DEC. 19 — PROBLEMS OF THE AGING

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TUES., JAN. 2 — CIVIL DEFENSE



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The Penn Harris Hotel

JACKSONVILLE, FLORIDA
Sunday, November 12, 1961
The Robert Meyer Hotel

ALLENTOWN, PENNSYLVANIA
Wednesday, November 15, 1961
The Americus Hotel

SOMERVILLE, NEW JERSEY
Thursday, November 16, 1961
The Far Hills Inn

NASHVILLE, TENNESSEE
Wednesday, November 29, 1961
Meharry Medical College

EDINBURG, TEXAS
Saturday, December 2, 1961
The Echo Motor Hotel

WACO, TEXAS
Sunday, December 10, 1961
The Holiday Inn

Plans for 1962 already include the following Symposia, with more being arranged:

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Friday, January 5, 1962
The Admiral Semmes Hotel

ST. PAUL, MINNESOTA
January 8, 1962
The Hotel Lowry

PORTLAND, OREGON
Wednesday, January 24, 1962
The Sheraton-Portland Hotel

ANCHORAGE, ALASKA
Saturday, February 24, 1962
The Westward Hotel

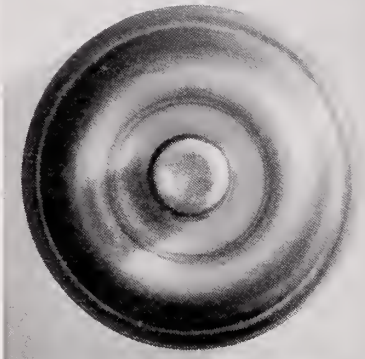
WINCHESTER, VIRGINIA
Wednesday, March 14, 1962
The Lee-Jackson Hotel

SIOUX CITY, IOWA
Thursday, March 15, 1962
The Sheraton-Martin Hotel

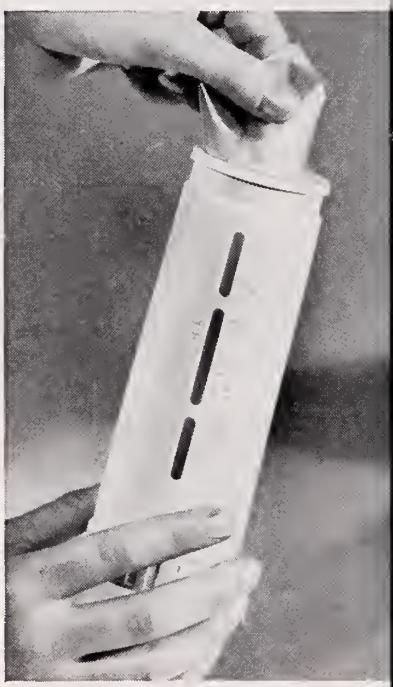
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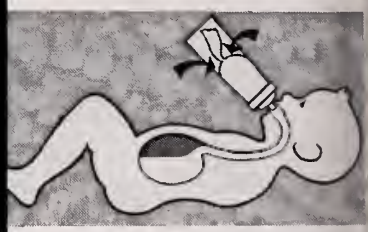


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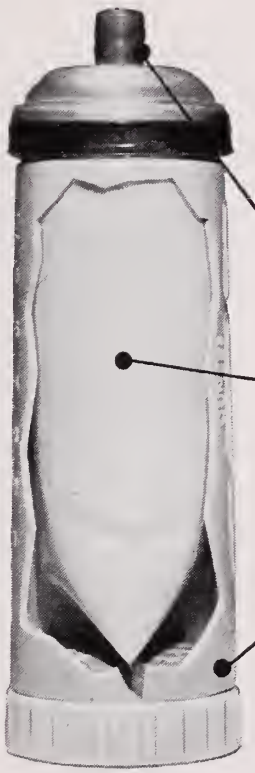
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. . . . . Since the volume of his accounts receivable is dependent on his ability and reputation, our conduct in dealing with his patients must do justice to the patient's trust and confidence in the physician . . . . . The doctor has an absorbing interest in being paid. A measure of the patient's appreciation for the doctor's care is how and when he pays. Nonpayment may be a reflection on the physician's professional ability . . . . .

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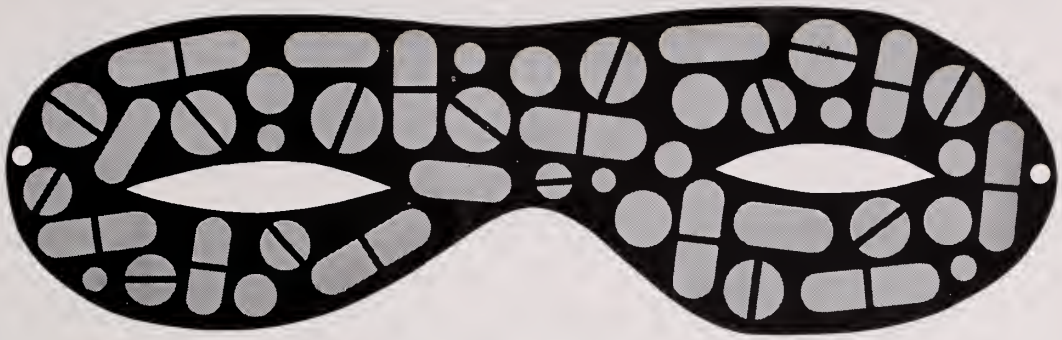
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Rhode Island Medical Journal,
January, 1961

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A STUDY OF PEDIATRICS

A Report Developed by the National Disease and Therapeutic Index, prepared by Lea Associates, Inc. of Flourtown, Pennsylvania

What is N.D.T.I.?

ORIGINATED in 1956, the National Disease and Therapeutic Index (N.D.T.I.) is a unique research project designed to provide a continuous flow of reliable, basic facts on private medical practice in the United States. Each of a panel of more than 1,200 physicians reports on all private patient contacts occurring during a forty-eight-hour period once each quarter of the year. Reporting physicians serve voluntarily for a period of four quarters.

Since names are selected randomly, every private practitioner in the country has an approximately equal chance of being asked to participate. Panel members are drawn from forty-eight states and include representatives of all physician specialties engaged primarily in private practice. Great care is taken to insure proper specialty-geographical representation and reporting coverage throughout 365 days of the year.

In return for the invaluable co-operation of individual reporting doctors, data on morbidity, patient and physician characteristics, and general areas of therapy are made available to the profession. Regular quarterly reports are issued to state, county and specialty medical associations, as well as to journals and medical schools. Additional information, beyond the regular reports, is available in the form of special tabulations given without charge upon request.

N.D.T.I. is supported financially by more than a dozen major pharmaceutical manufacturers. (A list of subscribers is available to anyone interested.) The pharmaceutical companies employ N.D.T.I. data primarily in the research and development area as a means of evaluating the need for new compounds which have demonstrated certain pharmacologic actions. Use of N.D.T.I. for advertising or publicity purposes is expressly prohibited by the subscriber contracts.

The Sample

This report, the second of a series describing different branches of private medical practice, focuses on the specialty of pediatrics. In presenting a profile of United States pediatric practice, told in certain statistical facts, appropriate comparisons are made with general practitioners and other types of specialties.

According to 1961 figures of the American Medical Association, there are over 8,200 pediatricians in private practice in the United States. Pediatricians account for almost 3 per cent of all private practitioners.

This report reflects data collected during the full year 1960. Figures are based on more than 10,000 actual patient-doctor contacts and 582 days of practice. The entire 1960 N.D.T.I. study is a collection of over 145,000 patient-doctor contacts, representing more than 9,000 days of private medical practice.

Patient Load

Pediatricians saw an average of 20.8 patients per work day during 1960. The average for general practitioners was slightly higher—22.1 patients per work day. In comparison with other full-time specialists, only dermatologists and allergists averaged more patients daily (21.4 and 29.9 patients respectively).

Where Patients Are Seen

	Ped.	GP
Office	74%	77%
Hospital	13	13
Home	6	7
Other (includes phone)	7	3
	100%	100%

Pediatricians saw almost 3 out of every 4 patients in the office; general practitioners had a slightly higher percentage of office contacts. It is interesting to note the difference between pediatricians and general practitioners regarding the "other" locations of patient contacts. Most of these consist of telephone contacts, presumably with the pediatric patients' parents. Since no other major private practice specialty group has as high a percentage of "other" location patient contacts, the pediatrician probably has more telephone consultations than his colleagues in other types of practice.

Distribution of Patients by Age

Patient Age	Ped.	GP
Under 1 year	29%	5%
1-2 years	19	4
3-5 years	21	5
6-10 years	20	6
11-20 years	8	12
Over 20 years	3	68
	100%	100%

continued on page 622



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A STUDY OF PEDIATRICS

continued from page 620

Patients under twenty-one years of age accounted for 97 per cent of the patients seen by pediatricians; patients under eleven years represented 89 per cent of the total. By contrast, only 20 per cent of the general practitioner patients were under eleven years of age. Infants (under one year) represented the most important single age group for pediatricians.

Percentage of Patients Seen by Sex

Sex of Patient	Ped.	GP
Female	50%	59%
Male	50	41
	100%	100%

Few specialties have the equal distribution of patients by sex which characterizes the pediatrician's practice. The average for all physicians indicates a 3 to 2 ratio of female over male patient-doctor contacts during 1960. General practitioners follow this pattern, with 59 per cent female and 41 per cent male patient-doctor contacts.

Number of Referred Diagnoses

Referrals	Ped.
Referred from other M.D.'s	12%
Nonreferred	88
	100%

More than one of every ten (12 per cent) diagnoses treated by pediatricians was the result of a referral from other physicians. In relation to the diagnoses treated by all physicians combined (including GP's), an average of 18 per cent of the diagnoses were referred from other physicians. Most of the pediatricians' patients, and therefore diagnoses, are regular patients compared to those apt to be seen by many other types of specialties, i.e., dermatology, urology, surgery.

Distribution of Diagnoses Per Patient

Number of Diagnoses	Ped.	GP
One diagnosis	88%	86%
Two diagnoses	11	12
Three or more diagnoses	1	2
	100%	100%

Almost nine of every ten (88 per cent) of the patient visits involved only one diagnosis or reason to see a pediatrician. A further investigation of N.D.T.I. data showed (generally) fewer multiple diagnoses reported with the diagnosis group "Special exams and conditions without sickness," which accounted for almost 39 per cent of pediatricians' patient visits. This group includes such reasons for visiting a physician as prophylactic inoculation or vaccination, well baby and child care, and examinations.

Leading Diagnoses

The table below ranks the leading individual diagnoses for pediatricians. The diagnosis classification is based on the World Health Organization codes. A rate is shown for each diagnosis, representing the number of such diagnosis reported for each 1,000 patient-doctor contacts.

The leading reason for visiting pediatricians during 1960 was "prophylactic inoculation or vaccination" accounting for 190 of overy 1,000 diagnoses reported by pediatricians. "Medical or special exams," which includes well baby and child care, was the second ranking reason for visits to pediatricians, accounting for 120 of every 1,000 diagnoses reported.

Diagnosis	Diagnoses Per 1000 Patient Visits
Prophylactic inoculation, vaccination	190
Medical or special exam (incl. well baby and child care)	120
Otitis media, without mastoiditis	68
Acute upper respiratory infection of multiple or unspecified sites	53
Acute tonsillitis	45
Acute pharyngitis	43
Single birth without mention of immaturity	37
Bronchitis, unqualified	33
Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over	28
Hay fever	20
Asthma	19
Allergic disorders, unspecified	16
Symptoms referable to abdomen and lower gastro-intestinal tract	13
Other dermatitis	11
Other general symptoms	11
Single born, immature	11
Influenza with other respiratory manifestations (non-pneumonia), and influenza unqualified	10
Other diseases of the lung and plural cavity	10

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(equivalent to 2 cc. paregoric)	

DOSAGE: **Adults:** Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

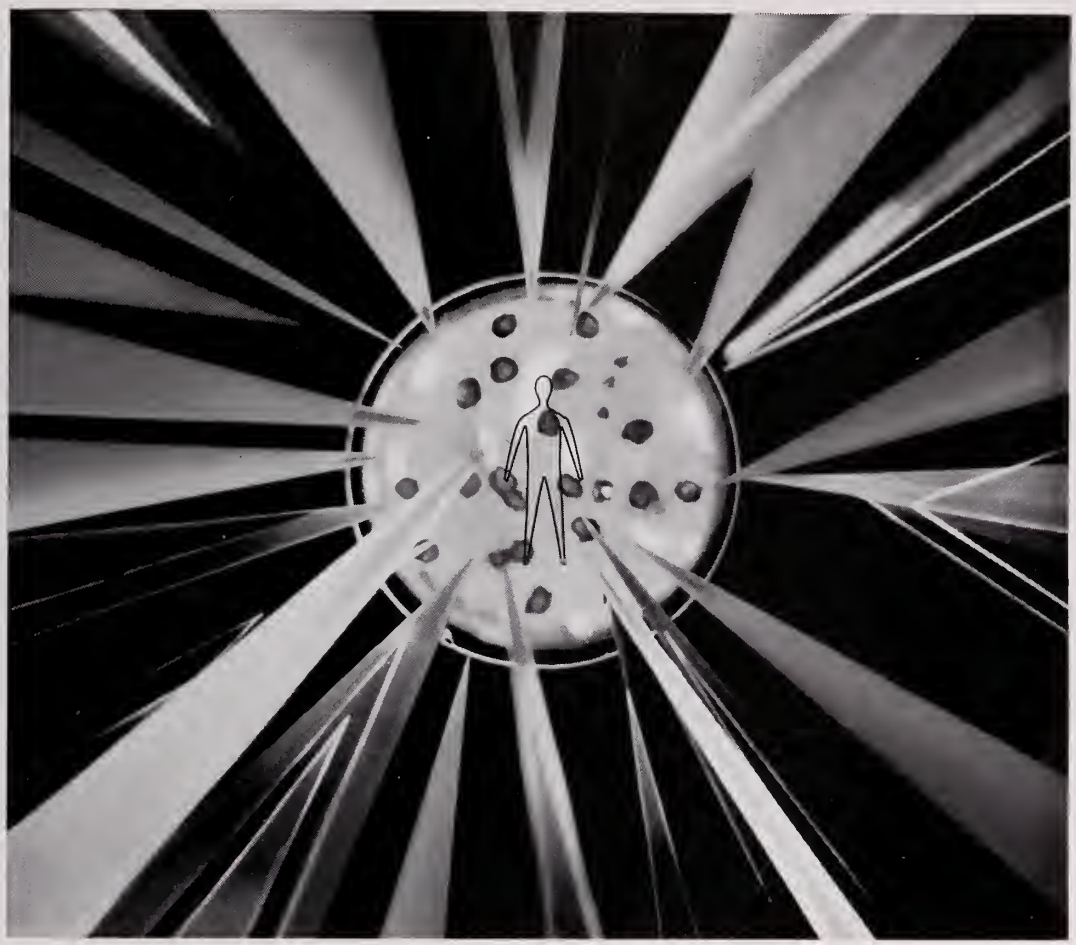
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The RHODE ISLAND MEDICAL JOURNAL

VOL. XLIV NOVEMBER, 1961 NO. 11

PERIPHERAL ARTERIAL OCCLUSIVE DISEASE

A Panel Presentation

JESSE P. EDDY III, M.D.; STEPHEN J. HOYE, M.D.; WILLIAM P. CORVESE, M.D.; SEEBERT J. GOLDOWSKY, M.D., AND LESTER L. VARGAS, M.D.

Presented at the 150th Annual Meeting of the Rhode Island Medical Society, at Providence, Rhode Island, on May 3, 1961

I. INTRODUCTION

JESSE P. EDDY III, M.D., *Moderator*
Director Vascular Service, Memorial Hospital, Pawtucket; Acting Associate Surgeon, Rhode Island Hospital, Providence

MUCH TIME and many words have been devoted recently in Rhode Island to the many aspects of cardiovascular disease. Arterial occlusive disease of the extremities is becoming an ever more important problem in this field. We shall limit our remarks to occlusive disease as it affects the lower extremities, and by limiting our consideration of the broad field of cardiovascular surgery to this small, but important, segment, attempt to bring up to date our general thinking on the subject.

With reference to the subject under discussion I want to state that a number of years ago I went down to the Providence City Hall and found that approximately 3,000 people had died in Providence in a given period, and of that number 400 had died of coronary occlusive disease, and 400 of cancer. But when one added together all of the people who died of occlusive disease, including cerebral vascular disease, and arterial disease of the kidneys, the total came to approximately 1,200. Thus you can see that the leading cause of death in this community is arterial occlusive disease. It is, therefore, important that we review an important segment of this problem, that of peripheral arterial occlusive disease, as it applies to the lower extremity.

If we speak of coronary occlusive disease as "having a heart attack," one might say equally well that having an occlusive situation in the lower extremities is like "having a leg attack." You never hear of anyone saying, "Well, I had a leg attack." However, it makes just as much sense as saying, "I have had a heart attack." The people with leg attacks can walk only a block or so, and as time goes on they may even lose their limb, and their life.

II. THE HISTORY AND NATURAL COURSE OF ARTERIOSCLEROSIS OBLITERANS*

STEPHEN J. HOYE, M.D.
Assistant Surgeon, Vascular Service, Memorial Hospital, Pawtucket; Assistant Surgeon, Miriam and Our Lady of Fatima hospitals, Providence; Instructor in Surgery, Harvard Medical School

Arteriosclerosis is a term which has been used to include several different types of degenerative arteriopathy which have different anatomic features and probably different causes. The two main types now recognized are: 1. Medial Arteriosclerosis: which is characterized by fibrosis, areas of focal necrosis, calcareous deposits, and sometimes ossification in the medial coat; and 2. Atherosclerosis: which is identified by the presence of yellowish plaque-like deposits in the intima which contain cholesterol, lipoid material, and lipophages.

Virchow first noted the fatty character of the material in the atheromatous lesions and felt that the causation was due to imbibition of fatty substances from the blood stream. However, later he adopted the mechanical theory of origin and considered that they developed as a result of mechanical irritation of the intima at certain points with secondary fatty degeneration and later impregnation with calcium salts. Since that time, the clinical and experimental investigations have developed along these two lines: 1. the disturbances in lipoid metab-

continued on next page

*From the Surgical Services of the Miriam Hospital, Providence, Rhode Island, and the Memorial Hospital, Pawtucket, Rhode Island.

olism with resultant arteriosclerosis; and 2. the localization and predilection of these pathological changes for certain areas of the body giving rise to the clinical syndromes of cerebral, coronary, and peripheral manifestations that we commonly associate with the term *Arteriosclerosis.*

That it existed in ancient times has been demonstrated by the findings of extensive arteriosclerotic lesions in Egyptian mummies. However, the first recorded descriptions of lesions which were undoubtedly arteriosclerotic were made in the sixteenth century by pathologists. In the latter part of the seventeenth century, Cowper noted that in thickened calcareous arteries, the passage of blood was impeded, and Harvey emphasized the difficulty of transmission of pulse in such arteries. Morgagni described the lesions of arteriosclerosis in considerable detail but the term *arteriosclerosis* was apparently originated by Lobstein in the early nineteenth century. The term *atherosclerosis* was originated much later by Marchand in 1904.

Arteriosclerosis obliterans is that combination of atherosclerosis and medial arteriosclerosis which occurs in the abdominal aorta and large and medium-sized arteries of the extremities, eventuating in occlusion of the arterial lumina. The relationship of arteriosclerosis to peripheral gangrene was first recognized by Jean Cruveilhier of Paris in 1829, and his two-volume atlas had several magnificent plates illustrating arterial clots at the site of sclerotic lesions in the lower leg vessels with distal gangrene (Figure 1). Typical sites of involvement by arteriosclerosis obliterans[1] are the distal third of the femoral arteries (Figure 2), the iliac arteries, and the distal part of the abdominal aorta. Compared to the lower extremities, involvement of the upper extremities is uncommon.

Because of this predilection and localization of the pathological process, the art of peripheral vascular surgery has significantly altered the course and prognosis of the clinical manifestations of pain and peripheral gangrene resulting from arteriosclerosis obliterans. Many direct arterial operations are being performed currently for atherosclerotic occlusive disease of the arterial system leading to the lower extremities. However, the consideration of an arterial operation for such a chronic and relatively generalized condition calls for criteria by which indications for or against this method of treatment may be properly judged. The natural history of the disease must necessarily be known in evaluating the efficacy of, and indications for, direct arterial surgery. What is the prognosis in relation to duration of life and loss of limb, with or without surgery? What is the relationship of diabetes and other environmental influences on the prognosis? Once established, what are the chances for the progression of the process of arteriosclerosis obliterans? Several studies[2,3,4] have evolved during the past few years in an attempt to answer these questions. Previous to this past decade, the absence of any applicable surgical techniques had made such an evaluation unnecessary, but currently some yardstick is necessary.



FIGURE 1

First recorded illustration of arteriosclerosis obliterans and peripheral gangrene. (After Cruveilhier, 1829.)



FIGURE 2

The frequency of occurrence of arteriosclerotic lesions is indicated by the depth of the black lines. (After Martin.[1] Reproduced by permission of the journal.)

Prognosis in Relation to Life

Juergens et al.[5] reported 520 patients followed for ten years after the diagnosis of arteriosclerosis obliterans was made. The survival rates are shown in Figure 3 compared with those of a general population of the same age and sex distribution. The poorer survival rates for those patients whose proximal point of occlusion was in the aorto-iliac vessels is contrasted with those whose proximal point of occlusion was in the femoral artery. The cause of

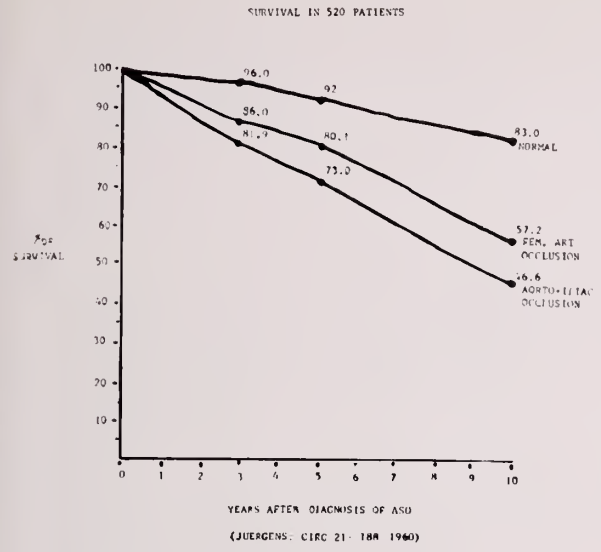


FIGURE 3

Prognosis in relation to life in all patients. (After Juergens.[5] Reproduced with permission of the author and journal.)

death could not be accurately determined in all those who died, but in three quarters of them sufficient evidence was available to deduce that death was due to arteriosclerosis of the coronary arteries.

Further limiting the presenting symptomatology, Boyd[6] (Figure 4) followed for ten years a group of 1,440 patients with a presenting symptom of intermittent claudication. The chance of survival for five years for all patients was 73.5 per cent, but this chance was almost halved for ten years (38.8 per cent) and almost halved again for fifteen years (22.0 per cent). On further analysis, the younger age groups showed good survival whereas the gaps widen as the initial age rises and as length of follow-up increases.

Not only the follow-up survival rate but also the rate of morbidity indicate the diffuseness of this disease. Rob and Singer[7] (Figure 5) followed a group of 322 patients for a mean of three years after their appearance at a peripheral vascular clinic with signs and symptoms of lower extremity arteriosclerosis. In the femoro-popliteal group, 51 patients had evidence of previous ischemic heart disease. During the follow-up period, 51 more had episodes of cardiac ischemia with 25 fatalities, thus making up a major portion of the 19 per cent mortality of the whole group. Cerebral arteriosclerosis had previously been manifest in six of 12 patients with current cerebrovascular accidents of which six were fatal. In the aorto-iliac group, there were 20 previous and 20 current episodes of cardiac ischemia, 14 fatal, again making up a major portion of the 32 per cent mortality. Cerebrovascular accidents occurred in four patients, all fatal. Thus, the diffuseness of the disease is adequately attested to.

SURVIVAL IN 1440 PTS. WITH CLAUDICATION

AGE	TO 5 YRS.	TO 10 YRS.	TO 15 YRS.
35-44	96%	78%	-
45-54	80.5	51.7	29
55-64	72.5	43	29
65-74	68.2	34	14.8
75+	49	13	
ALL PTS.	73.5%	38.8%	22.0%

(Boyd, Angiology 11 : 10 1960)

MORBIDITY WITHIN THREE YEARS

219 FEMORO-POPLITEAL:

CARDIAC: 51 previous
51 current - 25 fatal

CEREBRAL: 6 previous
12 current - 6 fatal

103 AORTO-ILIAC:

CARDIAC: 20 previous
20 current - 14 fatal

CEREBRAL: 4 current - 4 fatal

(Rob, BMJ Aug. 27, 1960)

FIGURES 4 and 5

Figure 4 (*Left*). Prognosis in relation to life in patients presenting with claudication. (After Boyd.[6] Reproduced with permission of the journal.)

Figure 5 (*Right*). Mortality and morbidity in arteriosclerosis obliterans. (After Rob.[7] Reproduced with permission of the author.)

Prognosis in Relation to Limb

In assessing the risk of loss of limb, Boyd's series of 1,440 patients (Figure 6) included 105 patients with gangrene requiring major amputations. The chance of amputation in the survivors was 7.2 per cent in the first five years and 12.2 per cent in the first ten years. This is slightly greater in the 35-44 age group (15.3 per cent) and in the 75 plus age group this incidence is approximately doubled (31.9 per cent).

Progression of Disease

However, the most important question that one has to answer upon seeing a patient with intermittent claudication is the rapidity with which the disease is progressing. Periods of exacerbation will often be followed by periods of remission, which is due to increased collateral circulation. The many cases without progression or with only moderate progression show that the increase in collateral circulation may keep pace with the reduction of lumen of the main arteries. In such cases, the symptoms may remain unchanged for years and the disease may be clinically stationary. Sooner or later, how-

continued on next page

MAJOR AMPUTATION IN 1440 PTS.
FROM ONSET OF INTERMITTENT CLAUDICATION

AGE	IN 5 YEARS	IN 10 YEARS
35-44	8.5%	15.3%
45-54	5.2%	8.8%
55-64	7.5%	10.9%
65-74	12%	19.4%
75+	14.6%	31.9%
ALL PTS.	7.2%	12.2%

(Boyd, Angiology 11 : 10 1960)

PROGRESSION AND INITIAL SYMPTOM

INITIAL SX	TOTAL	PROGRESSION	AMPUTATION
INTER. CLAUD.	270	151 (56%)	22 (8%)
I.C. + COLOR	39	22 (56%)	3 (8%)
REST PAIN	26	8 (31%)	2(7%)
ULCER-GANG.	15	10 (67%)	9 (60%)
ACUTE INSUFF.	9	1 (11%)	1 (11%)
MISC.	4	4	2
TOTAL	363	196 (54%)	39 (11%)

(Selvaag Acta Chir. Scand. : Suppl. 253 1960)

FIGURES 6 and 7

Figure 6 (*Left*). Prognosis of the limb in claudication. (After Boyd.[6] Reproduced with permission of the journal.)

Figure 7 (*Right*). Progression of arteriosclerosis obliterans in relation to symptoms. (After Selvaag.[10] Reproduced with permission of the journal.

ever, most cases show progression. But how often the progression occurs in the first few years after the onset of symptoms is difficult to say. Careful studies reported in the literature indicate progression rates varying from 25 per cent in a recent report from the Mayo Clinic[8] to 75 per cent recently quoted from the Cleveland Clinic.[9] Probably the true incidence lies somewhere between these. This is borne out by an excellent study from Norway by Selvaag[10] (Figure 7). He and his co-workers followed 363 patients over six years and assessed their incidence of progression prior to and while under observation. They found an over-all incidence of progression in 196 cases, or 54 per cent of the group. Interestingly, the incidence of progression is the same (56 per cent) in cases which began with uncomplicated claudication as in cases which started with coldness, with or without claudication, or color changes. When pain at rest or the picture of acute insufficiency was observed initially, progression was less frequent, thus reflecting the tendency to spontaneous improvement.

As shown by Selvaag (Figure 7), arteriography disclosed complete occlusion of one or more arteries in 84 per cent of cases. Forty to 50 per cent of those with occlusions had more than one occlusion in the same extremity, grouped according to the most proximal occlusion. There seemed to be no distinct difference in the incidence of progression between proximal and distal occlusions. The over-all incidence of progression was 58 per cent. The incidence of amputation seemed to be lower for occlusions in or proximal to the femoral artery (10 per cent) than for occlusions below this level (25 per cent).

ARTERIOGRAPHIC LEVEL OF OCCLUSION (363 PTS.)

LEVEL	TOTAL	PROGRESSION	AMPUTATION	DEATHS
AORTO-ILIAC	34	24 (70%)	4 (12%)	10 (29%)
SUP. FEMORAL	220	120 (55%)	22 (10%)	41 (19%)
DEEP FEM.+	9	7 (78%)	1 (11%)	4 (44%)
POPLITEAL	25	15 (60%)	7 (28%)	5 (20%
LEG ART.	18	11 (61%)	4 (22%)	7 (39%
NO OCCLUS.	57	19 (33%)	1 (2%)	8 (1

(Selvaag : Acta Chir. Scand. Suppl. 253 : 1960)

FIGURE 8

Progression in relation to arteriographic localization of disease. (After Selvaag.[10] Reproduced with permission of the journal.)

The arteriographic evidence of progression is quite striking when seen in arteriograms (Figure 9) taken serially for research purposes in patients presenting with intermittent claudication.[11] This compilation of arteriograms shows progression of disease with and without surgical intervention. They are all taken from actual arteriograms but pictured diagrammatically for ease in presentation. In A is

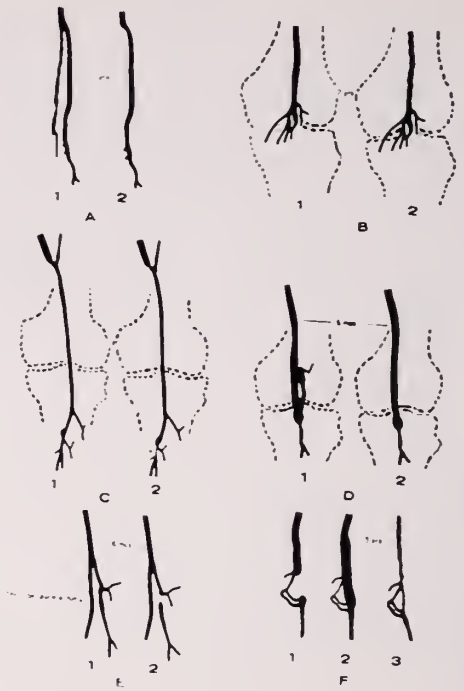


FIGURE 9

Progression of arteriosclerosis obliterans with and without surgery. (After Warren.[11] Reproduced with permission of the author.)

visualized a badly diseased superficial femoral artery, and in an arteriogram two years later, further closure with no increase in symptoms or signs in the intervening years. In B, a total block of the lower popliteal artery with collateral circulation can be seen, and two years later, roughening of the walls is apparent but with no further symptoms. In the remaining cases, progression of disease is demonstrated after arterial reconstruction. In C, the first arteriogram is two years after the placement of a by-pass graft. One year later, severe stricture has developed in the posterior tibial artery with continued patency of the graft after three years of function. In D, the first arteriogram is two years after a by-pass graft; six months later, the segment of the popliteal artery above the anastamosis is gone. The graft closed three years after initial operation, or six months after this arteriogram, with subsequent amputation. In E, the first arteriogram is two and a half years after thromboendarterectomy of the superficial femoral artery, showing an intact deep femoral artery segment. Six months later, occlusion of a segment of the deep femoral artery can be seen with no increase in symptoms. In F, there is a striking example of what happens to collaterals. The first arteriogram is preoperative, showing a block of the superficial femoral artery in the adductor canal. Three months after thromboendarterectomy, marked shrinkage of the collaterals can be seen. Three years after operation, re-enlargement of the collaterals is seen as stenosis recurs.

Thus we can see that progression occurs with or without surgery. However, in addition to this, we all know that progression of symptoms may take place without any demonstrable changes in the arteriograms.

The factors that affect progression are many and varied. Some we can influence; others we cannot control at the present time:

1. *Age.* As illustrated, the incidence of progression and of amputations was significantly higher at ages past 70 years. Undoubtedly, this is related to the reduced possibility of collateral development and less vital tissue in the aged.
2. *Diabetes.* There is a definitely higher incidence of progression and amputations in the diabetic and at an earlier age, although this does not seem to be related in a linear fashion to control of diabetes.
3. *Sex.* Although the number of men with arteriosclerosis obliterans outnumbers the women anywhere from 6 : 1 to 11 : 1, sex *per se* did not seem to influence progression.
4. *Smoking.* There is no clean-cut association, although there seem to be some beneficial results in individual cases by reduction or abstinence.
5. *Occupation.* No difference is demonstrable (heavy labor *vs.* sedentary).
6. *Plasma Cholesterol.* There is a slight tendency for it to be higher in patients with arteriosclerosis obliterans, but there is too much overlap for it to be significant in the individual case.
7. *Obesity.* In middle-aged, non-diabetic patients, obesity is not commonly associated with arteriosclerosis obliterans and is probably not significant in pathogenesis.
8. *Hypertension.* It is present in only 25 per cent. It is probably not a frequent accelerating factor in the disease process.

Conclusions

1. The natural history of arteriosclerosis obliterans is important in assessing the advisability of and beneficial effects of direct arterial surgery.

2. The diffuseness of the disease process is evidenced in the significant over-all mortality and morbidity, which are primarily attributable to cerebral and coronary arteriosclerosis.

3. The disease process in the extremities seems to be progressive in approximately 54 per cent of the cases; the incidence of amputation is about 12 per cent in patients presenting with symptoms of intermittent claudication.

4. Of the various factors affecting the progression of arteriosclerosis obliterans, diabetes and age are the most closely correlated; hence *when either of these factors is operative,* active surgical intervention should be considered earlier in the course of the disease process.

References

[1]Martin, P.: Pathological Anatomy of Atherosclerosis and Its Relation to Peripheral Artery Grafting. Angiology 9:349, 1958

[2]Silbert, S., and Zazeela, H.: Prognosis in Arteriosclerotic Peripheral Vascular Disease. J.A.M.A. 166:1816, 1958

[3]LeFevre, F. A.; Corbacioglu, C.; Humphries, A. W., and deWolfe, V. G.: Management of Arteriosclerosis Obliterans of the Extremities. J.A.M.A. 170:656, 1959

[4]Richards, R. L.: Prognosis in Intermittent Claudication. Brit. M. J. 2:1091, 1957

[5]Juergens, J. L.; Barker, N. W., and Hines, E. A.: Arteriosclerosis Obliterans: Review of 520 Cases with Special Reference to Pathogenic and Prognostic Factors. Circulation 21:188, 1960

[6]Boyd, A. M.: The Natural Course of Arteriosclerosis of the Lower Extremities. Angiology 11:10, 1960

[7]Singer, A., and Rob, C.: The Fate of the Claudicator. Brit. M. J. 2:633, 1960

[8]Schadt, D. C.; Hines, E. A.; Juergens, J. L., and Barker, N. W.: Chronic Atherosclerotic Occlusion of the Femoral Artery. J.A.M.A. 175:937, 1961

[9]Humphries, A. W.: Personal communication

[10]Selvaag, O., and Bjornstad, P.: Progressive Tendency of Arteriosclerosis Obliterans of the Lower Extremities. Acta Chir. Scand. Supp. 253:187, 1960

[11]Warren, R.; John, H. T.; Shepherd, R. C., and Villavicencio, J. L.: Studies on Patients with Arteriosclerotic Obliterative Disease of the Femoral Artery. Surgery 49:1, 1961

[12]Cowdry, E. V.: Arteriosclerosis—A Survey of the Problem. New York, The MacMillan Company, 1933

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III. THE DIAGNOSIS OF PERIPHERAL ARTERIAI OCCLUSIVE DISEASE*

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Assistant Surgeon, Department of Surgery, Rhode Island Hospital

Advances in vascular surgery emphasize the need for precise diagnosis in peripheral arterial disease. The problem is no longer one of academic interest since effective techniques are now available for restoring blood flow to the extremities and other body regions. Successful employment of these techniques requires the thorough assessment of vascular impairment and the careful selection of patients if success is to be assured. The relief of incapacitating symptoms and prevention of major amputations are goals worthy of some diagnostic effort, particularly when these efforts involve simple clinical procedures. It is my purpose briefly to review some of the more salient diagnostic features of peripheral arterial insufficiency, including the laboratory procedures employed in the evaluation of the arterial circulation.

Acute Arterial Occlusion

The sudden interruption of blood flow to an extremity is usually manifested by acute pain. Numbness and loss of motor power rapidly follow. The limb becomes pale, cool, and flaccid. If arterial continuity is not re-established, the end result may be gangrene. The diagnosis of acute arterial occlusion in its classic form is familiar to most physicians. Occasionally, the symptoms may develop gradually and the true nature of the occlusion not suspected. Frequently, patients with this clinical picture will have a history of cardiac disease—either auricular fibrillation secondary to rheumatic valvulitis or a recent myocardial infarction. In most instances, acute occlusion is the result of embolism. A similar picture may follow acute thrombotic occlusion occurring in a vessel already narrowed by arteriosclerosis. Formerly, it was considered important to distinguish between these two conditions since the treatment of each differed. However, with available modern techniques, prompt operation is frequently effective in both types of occlusions. The location of the arterial block can be determined from the patient's complaints and by careful palpation of the peripheral pulses. Occlusion of the terminal aorta or iliac arteries results in pain in the lower abdomen, back, buttocks, hips, and thighs. When occlusion is complete, there is absence of all pulses in the lower extremities. The aortic pulse, proximal to the occlusion, may be accentuated. Both limbs appear cadaveric and cool to the level of the mid-thigh and are paralyzed.

When occlusion occurs in the femoral artery, the ensuing symptoms are similar but are referable to the leg below the knee. Similarly, occlusion at the femoro-popliteal level produces ischemic manifestations in the distal third of the leg. Some authors have suggested the use of arteriography to delineate precisely the site of acute arterial occlusions. In my experience, this has not been necessary. However, arteriography may be of value in planning a reconstructive procedure in acute thrombotic occlusions by demonstrating a patent popliteal outflow tract.

Chronic Arterial Occlusion

The presenting complaint of nearly all patients with chronic arterial disease is pain. Its distribution is identical to that seen in the acute form, but the intensity of the symptoms vary, depending upon the status of the collateral circulation (Figure 1.) In most instances, patients with chronic occlusions are free of pain at rest. Characteristically, pain occurs only with exercise and is promptly relieved with rest—the so-called intermittent claudication. The ease with which symptoms are precipitated is an indication of the degree of vascular impairment. The patient may also complain of coldness in the extremity. Sensory changes appear late in the course of the disease. Muscle atrophy and other

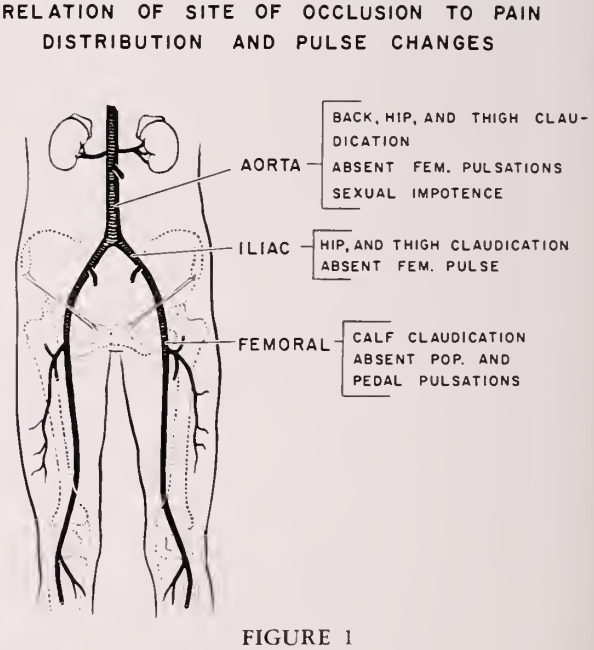


FIGURE 1

Relation of site of occlusion to pain distribution and pulse changes.

*From the Surgical Service, Division of Cardiovascular Surgery, Rhode Island Hospital, Providence, R. I.

trophic changes similarly develop only after the collateral bed has been severely compromised.

Palpation of the peripheral pulses is the most important part of the examination in patients suspected of having chronic arterial insufficiency. The involved extremity may also feel cooler than the one with normal circulation. Auscultation over the affected blood vessel will often reveal a systolic bruit which is an indication of incomplete obstruction. The degree of vascular insufficiency may be further substantiated by evaluating the postural color changes. Elevation of an ischemic extremity will result in pallor and dependency in rubor. Observation of the venous filling time and the time for return of capillary pulse is frequently helpful.

Differential Diagnosis

The symptoms of peripheral arterial insufficiency are frequently confused with those of a variety of neurological and musculoskeletal disorders of the lower extremities. Obstruction of the terminal aorta and complete or incomplete obstructions of the iliac arteries are the lesions most likely to give rise to these confusing patterns, if the true nature of the underlying pathology is not appreciated. Symptoms may be attributed to nerve root compression (intervertebral disk protrusion) and other low back disorders. However, if care is taken to include palpation of the peripheral pulses, such diagnostic errors will rarely occur and the vascular lesion will not be overlooked. Gilfillan, Jones, Roland and Wylie were among the first to call attention to this problem. Acute ileofemoral thrombophlebitis should rarely cause difficulty because of the rapid onset of swelling which is one of the dominant features of this condition.

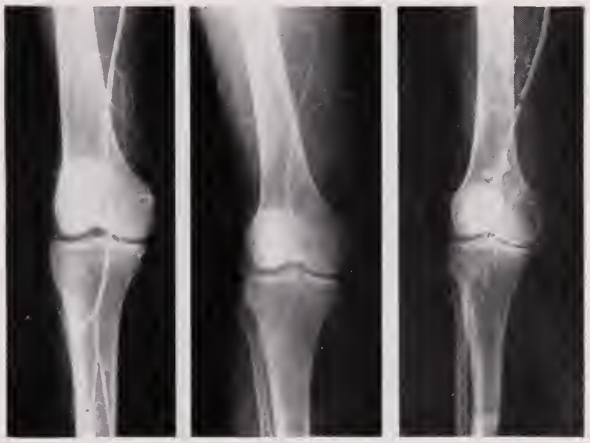
Arteriography

The most important diagnostic procedure and the final determinant of operability in occlusive arterial disease is arteriography. This is a relatively simple diagnostic procedure which can be performed under local anesthesia without elaborate equipment. The intra-arterial injection of a radio-opaque material with properly timed roentgenograms clearly defines the location of the obstructing lesion and its extent. Further, the patency of the vascular bed beyond the occlusion ("the run-off") can be determined. If patients are to be properly selected for restorative surgery and the appropriate procedure employed, it is essential to determine the adequacy of "the run-off." While direct arterial surgery is applicable to segmental occlusions, it is of little or no value in the treatment of diffuse arteriosclerotic involvement of the extremity. Recently, I have employed the technique of roentgencinematography continuously to record on 35mm. motion picture film the course of the injected radio-opaque substance through the arterial tree. This method, by virtue of its continuous recording, eliminates the error of timing in exposure of single X-ray films and also provides a dynamic picture of the pathological arterial changes. The femoro-popliteal level may be studied by the percutaneous injection of the dye in the common femoral artery. Aortography is used in the investigation of the aorto-iliac segments and is accomplished by one of several methods—translumbar aortography, retrograde aortography via the femoral artery, and by the recently introduced technique of intravenous aortography. Figure 2 is that of a normal femoral arteriogram. Figure 3 illustrates a segmental block with an adequate or good "run-off" (a lesion suitable for a reconstructive operation). Figure 4 shows an obstructing lesion with an inadequate or poor "run-off" (this lesion is not amenable to direct arterial surgery).

Other Diagnostic Adjuncts

A number of other techniques, among them oscillometry, skin temperature determinations, sweating tests, digital plethysmography and blood flow studies, walking tests, ergometry, and diagnostic sympathetic blocks, have been employed in the diagnosis of obliterative arterial disease. Some of these are of importance in selecting patients likely to benefit from lumbar sympathectomy. However, experience has shown that these methods of investigation are of little value and not essential in selecting patients for definitive arterial surgery. The measurement of tissue clearance of radioactive isotopes is another mode of measuring blood flow but finds its use confined to physiologic studies. The determination of the tissue oxygen tension by means of a platinum electrode is also a tool chiefly for laboratory use.

continued on next page



FIGURES 2, 3 and 4

Figure 2. Normal femoral arteriogram demonstrating normal popliteal outflow.

Figure 3. A high femoral block with a normal or adequate outflow tree.

Figure 4. Femoral popliteal occlusion with inadequate run-off.

SUMMARY

The diagnosis of peripheral arterial occlusive disease is readily made with a high degree of accuracy on the basis of clinical symptoms and objective findings. Acute and chronic arterial obstructions are amenable to reconstructive surgery. Peripheral arteriography will clearly delineate the extent of the obliterative process and provide the necessary information for selecting the appropriate treatment. Other diagnostic procedures have their greatest usefulness in selecting candidates for lumbar sympathectomy. The importance of differentiating symptoms of vascular origin of the lower extremities from other entities is stressed.

References

[1]Allen, E. V.; Barker, N. W., and Hines, E. A., Jr.: Peripheral Vascular Diseases. 2nd Ed., W. B. Saunders Co., Phil., 1955

[2]Cranley, J. J., Jr.; Buchanan, J. L.; Simeone, F. A., and Linton, R. R.: A Critique of Laboratory Methods in Peripheral Vascular Disease. Surgery 31:74, 1952

[3]Crawford, E. S.; DeBakey, M. E., and Cooley, D. A.: Current Concepts in the Management of Arteriosclerotic Occlusive Disease Based on Treatment of More than Seven Hundred and Fifty Patients by Direct Approach. West. J. Surg. 67:25, 1959

[4]Gilfillan, R. S.; Jones, O. W., Jr.; Roland, S. I., and Wylie, E. J.: Arterial Occlusions Simulating Neurological Disorders of the Lower Limbs. J.A.M.A. 154:1149, 1954

[5]Hardy, J. D.: Surgery of the Aorta and Its Branches (Part 1). Am. Pract. and Digest Treat. 2:3, 1960

[6]Linton, R. R.: Peripheral Vascular Diseases. New England J. Med. 260:272, 1959

[7]Vargas, L. L., and Corvese, W. P.: Leriche's Syndrome. Rhode Island M. J. 43:305, 1960

IV. ACUTE ARTERIAL OCCLUSIONS*

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Acute interruption of the arterial circulation of the extremities or of the bowel constitutes a surgical emergency. For the purposes of this discussion, three types of acute vascular accident will be considered: traumatic, thrombotic, and embolic.

Arterial trauma resulting in major disturbance to the circulation of an extremity may cause severe spasm, acute contusion with thrombosis, laceration, or actual severance. Severe ischemia with blanching or cyanosis, coldness, anesthesia, or inability to move the toes is an indication for early exploration of the vessels. Profuse bleeding from a wound or a pulsating hematoma signifies laceration or severance of a major vessel. Exploration of vessels has come to be a well-standardized procedure, and since it is not very disturbing to the patient, should be done where any doubt of viability exists. Orthopedic and fracture surgeons should be mindful of vessel injury in cases of fracture or dislocation, compound or closed, and should be ready to seek help from a vascular surgeon when a question of vascular injury exists. Undoubtedly many fractured extremities have been lost in the past that might have been saved by combining early arterial surgery with appropriate treatment of the fracture. Several methods are available for management of the local pathological process. Simple closure is sufficient for clean lacerations, while end-to-end suture may suffice for completely severed vessels. Excision and primary closure may be used for repair of badly lacerated, contused, or thrombosed vessels where the involvement is of limited extent. For longer segments, replacement by autogenous vein graft or synthetic prosthesis of dacron or teflon will be required. For this specific purpose autogenous vein grafts have often been favored, but either type of replacement will provide a satisfactory result. Where severe spasm alone is found, local application to the vessel of procaine or papaverine solution may be effective. Emergency arteriography is a useful diagnostic procedure in acute arterial lesions, and can provide an accurate pre-operative diagnosis in difficult cases; or it may even obviate the need for surgery. The demonstration of an accessible block or extravasation of opaque material will provide the necessary impetus for surgery in doubtful cases.

Acute arterial thrombosis due to atherosclerosis occupies an intermediate zone between chronic arteriosclerosis obliterans to which it is related pathologically, and acute arterial embolism to which it is related clinically. The clinical differentiation of thrombosis and embolism may be extremely difficult. The absence of those manifestations of systemic disease, which usually accompany embolism, will suggest thrombosis, but a definitive and final determination often cannot be made on clinical grounds alone. For example, in a series of forty-two patients manifesting verified arterial embolism, previously reported by Goldowsky and Bowen,[1] no source or origin for the emboli could be found on clinical evaluation in seven, and in five of these cases none could be found even at post-mortem examination. In fact, arteriography, which is very useful in the clinical evaluation of chronic thrombotic lesions, may not itself give a fully accurate answer (Figure 1). The approach as regards urgent sur-

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FIGURE 1

Embolus or Thrombus? Femoral arteriogram showing acute occlusion in a sixty-eight-year-old dentist who had been well previously. A block with an actual filling defect in a normal appearing vessel can be seen suggestive of an embolus. The absence of collateral circulation is characteristic of acute occlusions. Actually, this proved to be a thrombus, propagating proximally from an atheromatous occlusion of the distal popliteal artery. The new thrombus was removed, but the distal lesion was not amenable to surgery. Sympathectomy was performed with eventual survival of the extremity.

gery may be somewhat more conservative in thrombosis than in embolism when the diagnosis is reasonably clear, but when viability is seriously impaired or in doubt, surgery should not be delayed. The technical procedures available are thrombectomy, thromboendarterectomy, and by-pass grafting with a plastic prosthesis.

The diagnosis of acute peripheral arterial embolic occlusion rests on the concurrence of certain acute and chronic, or generalized and local, symptoms and signs. The acute episode is characterized by the occurrence of pain, coldness, pallor, numbness, and inability to move the toes. When these occur in a patient with rheumatic or arteriosclerotic heart disease, mitral stenosis, auricular fibrillation, congestive failure, or recent coronary occlusion giving rise to a mural thrombus, the diagnosis of embolism is highly probable. The presence of cardiac disease, however, does not confirm the presence of embolism, nor, as previously pointed out, does its absence exclude this possibility. For example, atheromatous plaques in the aorta, particularly when overlaid with thrombus, may give rise to distal emboli, as may also aneurysms which, characteristically, contain laminated thrombus. The diagnosis of embolism can usually be made on clinical grounds, but occasionally a femoral arteriogram, even on the operating table, may be helpful.

As soon as the diagnosis is apparent, embolectomy should be performed. Although early intervention is desirable, operation need not be precluded by even a prolonged delay in diagnosis. This principle, now generally accepted, was further confirmed in our previously mentioned study. Improved techniques, such as multiple arteriotomies and wash-through or retrograde flushing procedures, render surgery effective even after a delay of hours, and in some cases days. Permanent anticoagulation should be instituted in the postoperative period when there are not contraindications. Our experience with long-term anticoagulation has been very favorable.

In embolism of the upper extremity, where formerly a conservative approach was recommended, the indications for surgery are now essentially the same as for the lower extremity.

With the demonstration of the feasibility of the surgical management of acute mesenteric occlusions, this area has recently been receiving much attention. Under the impetus of Doctor Robert S. Shaw,[2] superior mesenteric embolectomy and thrombectomy have been attempted with increasing frequency. Success at this site has thus far been very limited, but increasing awareness of the possibility of surgical intervention should lead to more encouraging results. Internal carotid embolectomy has also been carried out successfully,[3] and should always be considered in appropriate cases.

References

[1]Goldowsky, Seebert J., and Bowen, J. Robert: Arterial Embolectomy. J.A.M.A. 172:799, 1960

[2]Shaw, Robert S.: Superior Mesenteric Artery Embolectomy in Treatment of Massive Mesenteric Infarction. New England J. Med. 257:595, 1957

[3]Kleaveland, Richard: Internal-Carotid-Artery Embolectomy. New England J. Med. 264:759, 1961

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MAIL EARLY IN THE DAY

All members of the Society are urged to give full co-operation to the Providence postal authorities in their effort to give impetus to the nationwide improved mail service program. The deposit of all mail late in the afternoon and evening hours creates an avalanche that taxes the manpower facilities of the post office department here.

Physicians can help the program by presenting volume mail in the morning hours whenever possible. Your co-operation is expected.

V. SURGICAL TREATMENT OF CHRONIC ARTERIAL OCCLUSIVE DISEASE*

LESTER L. VARGAS, M.D.
Surgeon-in-Chief, Rhode Island Hospital; Director, Cardiovascular Research Laboratory, Rhode Island Hospital; Assistant Clinical Professor of Surgery, Tufts University School of Medicine, Boston, Massachusetts

The surgical objective in treating chronic arterial occlusive disease is to increase blood supply to the affected part in an effort to relieve symptoms and conserve tissue. This can be accomplished by directly removing the obstructing process or by circumventing the diseased segment of the artery with a suitable graft. Indirectly, the collateral blood flow to a region can be improved by sympathetic ganglionectomy. The choice of the surgical procedure employed in chronic arterial occlusive disease of the lower extremities will depend upon the location of the obstruction, its extent, and the condition of blood vessels distal to the occlusion—the so-called "run-off." Other factors such as the severity of symptoms, threatened viability of the limb, and the general condition of the patient also play an important role in selecting suitable candidates for surgical treatment. These features have been reviewed by other authors elsewhere in this issue and will not be discussed in this presentation. I propose to describe the modern vascular surgical techniques currently employed for the relief of chronic ischemia of the lower extremities.

Endarterectomy

In 1947, Dos Santos[1] demonstrated that endarterectomy was an effective method of restoring vascular continuity in occluded arteries. In this technique, the pathological intima and intraluminal thrombotic material is separated from the host vessel by dissection in a plane between the intima and media and is removed as a solid core (Figure 1). At first, a long arteriotomy was employed but the design of a variety of internal stripping instruments now makes it possible to carry out the procedure through several short arteriotomies (Figure 2). Recently, the technique has been further refined to include the application of an onlay or patch graft of fresh autogenous vein at the arteriotomy site to ensure that the artery will not be narrowed by the repair. Where the disease has resulted in long-narrowed arterial segments, strips of fresh saphenous vein can be used to restore normal arterial caliber (Figure 3).

Wylie and his associates[3] have described the changes occurring in the artery following the surgi-

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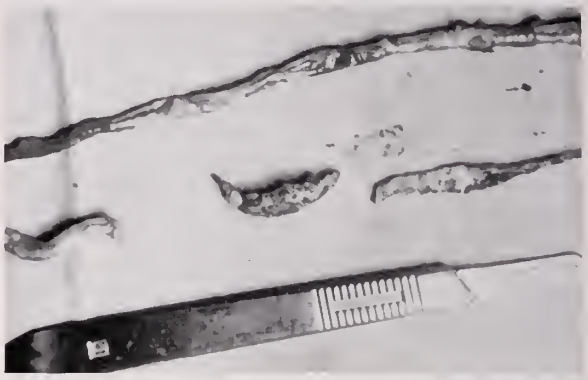


FIGURE 1

Core of atheromatous material removed at operation from the superficial femoral artery.

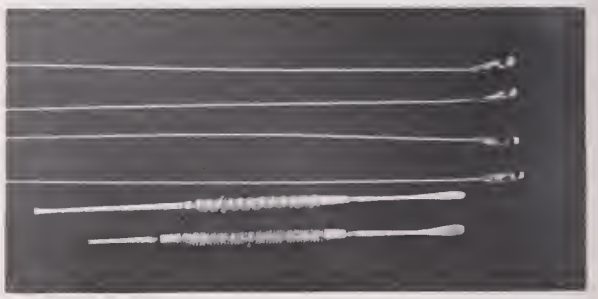


FIGURE 2

Various instruments employed in performing thrombo-endarterectomy.



FIGURE 3

Drawing of patch graft.

cal removal of its intima and occluding atheroma. A fibrinous clot immediately replaces the excised intima and is confined to the periphery of the artery by the high velocity blood flow. Fibroblasts from the adjacent media then invade the lining fibrinous matrix and become modified. By the fifth week these cells are indistinguishable from those of normal intima.

Successful utilization of this method depends upon meticulous attention to details of vascular surgical technique. Experience has shown that this method is best suited to cases in which the occlusion is well localized in relatively large vessels. It is widely employed in the surgical treatment of chronic arteriosclerotic aorto-iliac occlusion[4] (Figure 4). The operation is also suitable in the treatment of short segmental occlusions of the superficial femoral artery.

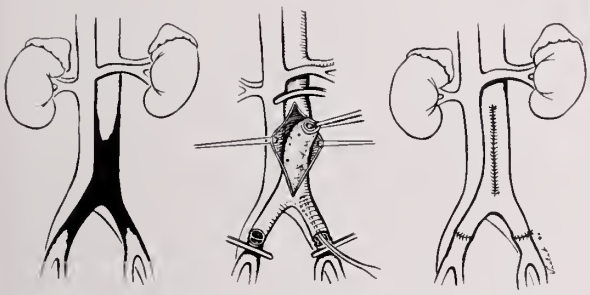


FIGURE 4
Aorto-iliac endarterectomy.

Resection with Graft

The concept that an occluded arterial segment could be resected and vascular continuity restored by the interpolation of a suitable blood vessel graft is not new. Carrel[5] and others,[6] at the turn of the century, demonstrated, in experimental animals, the feasibility of utilizing a variety of blood vessel grafts, including some fashioned from synthetic materials. However, it was not until 1948 that a preserved arterial homograft was successfully used clinically by Gross and his associates.[7] Since then, blood vessel grafts have been widely used in treating chronic arterial occlusions.

Preserved arterial homografts, at first, were considered ideal arterial substitutes, particularly for larger vessels, but their long-term use revealed that they underwent degenerative changes resulting in thinning, dilitation, and rupture. For this reason, other materials were studied. Autogenous veins, when used to replace larger arteries within the abdomen or thorax, quickly became aneurysmal but were found to function admirably in the extremities where they received support from surrounding muscles. In 1952, Voorhees, Jaretzki, and Blakemore[8] reported the successful use of a porous fabric prosthesis woven from Vinyon "N." They demonstrated that the fabric interstices quickly became filled with fibrin which effectively rendered the graft impervious to blood within a few minutes. Subsequent fibroplastic invasion of the clot resulted in the growth of a new blood vessel where the woven fabric served as a scaffold. This significant achievement provided the research stimulus which culminated in the development of commercially available prostheses of dacron and teflon (Figure 5).

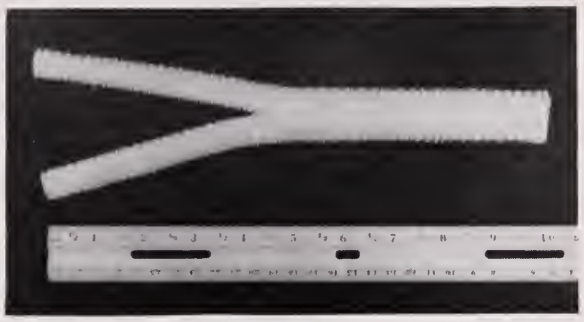


FIGURE 5
A commercially-available bifurcation graft of knitted dacron.

Like endarterectomy, the technique of resection with grafting is best suited to larger vessels such as the aorta and iliac arteries (Figure 6). It is also in these larger vessels that woven plastic prostheses function most effectively. In smaller peripheral arteries, the need to interrupt collateral branches and the danger of constriction at the suture line results in a high incidence of failure when end-to-end graft interpolation is employed.



FIGURE 6
A synthetic bifurcation graft after implantation.

continued on next page

By-pass Graft

To overcome the disadvantages of arterial excision and to facilitate surgical treatment of long segmental occlusions, Kunlin[9] introduced the method of by-pass grafting. This technique requires an end-to-side anastomosis of a blood vessel graft to a host artery proximal and distal to the occlusion (Figure 7). Extensive dissection of the diseased artery is not necessary and collateral circulation to the limb is preserved. Consequently, failure of the graft is less likely to result in irreversible ischemic damage to the extremity. Another important advantage of this method is that the site of anastomosis on the host artery can be carefully selected to avoid arteriosclerotic plaques. The caliber of the vessel does not limit the size of the anastomosis since the end of the graft can be flared and beveled to produce an opening of larger diameter than the recipient vessel.

Extensive experience with this technique by Linton and Menendez[10] and by Crawford and DeBakey[11] has clearly demonstrated its superiority. While some vascular surgeons continue to employ fabric prostheses for by-passing peripheral vessels, recent experience suggests that autogenous vein grafts, when available, may be superior.

Lumbar Sympathectomy

Excision of the lumbar sympathetic ganglionated chain is a time-honored method used to enhance blood supply to the distal lower extremity. By decreasing the resistance to blood flow in the collateral vascular bed, increased circulation to the skin results. In some instances, symptoms of ischemia are relieved following lumbar sympathectomy. Where indications for direct arterial surgery are borderline, it is possible that preliminary or concomitant sympathectomy will improve the exit flow. However, it must be recognized that this indirect method of increasing blood flow constitutes a last effort at limb salvage and has no place in the definitive treatment of occlusive arterial disease. It is only after demonstrating by arteriography that direct arterial surgery is not feasible that a surgeon is justified in utilizing this procedure.

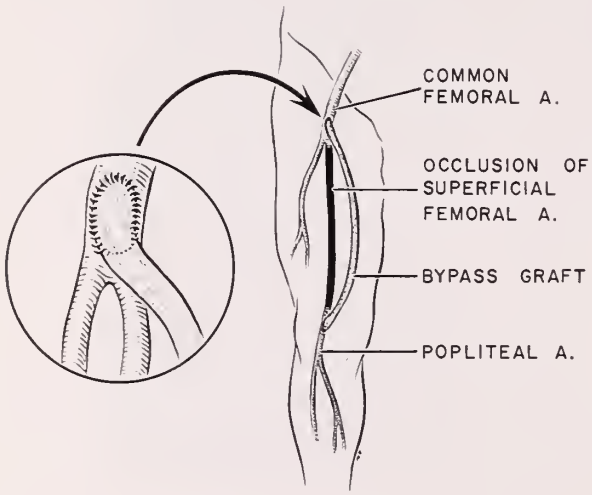


FIGURE 7

By-pass graft. (Drawing.)

Comment

The success—or failure—of the methods discussed above in enhancing blood flow to an extremity will depend largely upon the criteria for selecting patients. Where an adequate "exit flow" has been demonstrated by arteriography and a limb is in jeopardy, a direct operation on the occluded vessel is justified. To do nothing is to condemn the extremity to early amputation. The pessimistic reports of some authors,[12] calling attention to reocclusion of grafts from two to four years after implantation, while honest and objective, mean little to the patient who would prefer to walk with his own limb for as long as possible. On the other hand, where tissue viability is unimpaired, the vascular surgeon must exercise judgment and restraint in employing direct arterial surgery to relieve symptoms. Clearly, any procedure that would threaten limb viability is ill-advised. Nonetheless, in many cases, short segmental occlusions producing distressing symptoms in otherwise normal limbs are amenable to treatment by conservative surgical techniques. In the author's personal experience no limb has been lost where a by-pass graft or endarterectomy has been employed to relieve symptoms.

SUMMARY

In an extremity compromised by arteriosclerotic arterial occlusion, increased blood flow is essential if viability is to be preserved and symptoms relieved. Endarterectomy, excision with graft, or by-pass grafting will achieve this objective where attention is directed toward careful selection of patients. Demonstration of an adequate "run-off" or "exit-flow" by arteriography is a prerequisite. Lumbar sympathectomy is reserved for patients who cannot benefit from direct arterial surgery.

References

[1]Dos Santos, J. C.: Sur las Desobstruction des Thromboses Artérielle Anciennes. Mém. Acad. Chir. 73:409, 1947

[2]Senning, A.: Strip Graft Technique. Acta Chir. Scand. 118:81, 1959

[3]Wylie, E. J.; Kerr, E., and Davies, O.: Experimental and Clinical Experience with the Use of Fascia Lata Applied as a Graft about Major Arteries after Thromboendarterectomy and Aneurysmorrhaphy. Surg. Gynec. and Obst. 93:257, 1951

[4]Vargas, L. L., and Corvese, W. P.: Leriche's Syndrome: Review of Clinical Features and Surgical Treatment. R. I. Med. J. 43:305, 1960

[5]Carrel, A.: Ultimate Results of Aortic Transplantation. J. Exper. Med. 15:389, 1912
[6]Guthrie, C. C.: End Results of Arterial Restitution with Devitalized Tissue. J.A.M.A. 73:186, 1919
[7]Gross, R. E.; Hurwitt, E. S.; Bill, A. H., and Pierce, E. C., 2nd: Preliminary Observations on the Use of Human Arterial Grafts in the Treatment of Certain Cardiovascular Defects. New Eng. J. Med. 239:578, 1948
[8]Voorhees, A. B., Jr.; Jaretzki, A., III, and Blakemore, A. H.: The Use of Tubes Constructed from Vinyon "N" Cloth in Bridging Arterial Defects. Ann. Surg. 135:332, 1952
[9]Kunlin, J.: Le Traitement de L'ischemie Artérique par la Greffe Veineuse Longue. Rev. Chir. 70:206, 1951
[10]Linton, R. R., and Menendez, C. V.: Arterial Homografts: A Comparison of Results with End-to-End and End-to-Side Vascular Anastomoses. Ann. Surg. 142:568, 1955
[11]Crawford, E. S., and DeBakey, M. E.: The By-Pass Operation in the Treatment of Arteriosclerotic Occlusive Disease of the Lower Extremities. Surg. Gynec. and Obst. 101:529, 1955
[12]Warren, R.; John, H. T.; Shepard, R. C., and Villavicencio, J. L.: Studies on Patients with Arteriosclerotic Obliterative Disease of the Femoral Artery. Surg. 49:1, 1961

VI. DISCUSSION

Doctor Eddy: The first question is directed to either Doctor Hoye or Doctor Corvese. The question is on the differential diagnosis, between atherosclerosis and thrombo-angiitis—Buerger's Disease—as a cause of arterial obstruction. I think this means: What is the difference between atherosclerotic occlusion and Buerger's Disease?

Doctor Corvese: I believe that the differential diagnosis between these diseases is becoming of less importance today to the vascular surgeons. What we formerly termed Buerger's Disease is today being considered in many circles as being a variation of arteriosclerosis obliterans. There perhaps still is a disease occurring in young males which is preceded by migratory phlebitis, and does respond with the elimination of tobacco. But, for practical purposes, I think the treatment is essentially the same.

Doctor Eddy: Doctor Hoye, how important is the finding of calcification by X-ray in the arterial wall?

Doctor Hoye: I think from the view of prognosis and treatment the finding of calcification in an X-ray *per se* is important only in the sense that this is a particular type of arteriosclerosis, commonly called medial arteriosclerosis, and is an indication of arteriosclerosis alone, and it has no effect on either prognosis or treatment. However, a by-pass graft or a thrombo-endarterectomy, in the presence of calcification seen by X-ray may sometimes be difficult, if not impossible, because of the depth of the process.

Doctor Eddy: Doctor Goldowsky, can you give us more detail about anticoagulant therapy associated with the removal of emboli?

Dr. Goldowsky: I presume the question has reference to the indications for the method of administering anticoagulants in those patients who have had embolectomy.

Unlike in other forms of arterial surgery, where it is generally felt post-operative anticoagulation is undesirable, probably even contraindicated, following embolectomy it is given, not, of course, for local protection, but to protect the patient against further embolic phenomena.

I generally give the patients heparin for the first forty-eight or seventy-two hours, either in a rather empirical manner, 50 to 100 mg. every four to six hours intramuscularly, with titration by Lee-White clotting times twice a day, or more desirable for the purposes of titration, 50 to 100 mg. intravenously every four to six hours, similarly controlled.

It is desirable, preoperative, to obtain a prothrombin activity determination so that you may know where you stand later on. As soon as the patient is able to take something by mouth, he can be given dicumarol, or coumadin which is more popular at the present time. Then, in the case of coumadin, the first prothrombin activity should be undertaken in twenty-four hours, and for dicumarol at the end of forty-eight hours. This must be taken three to four hours after the last dose of heparin, because it has been definitely demonstrated that heparin has a decided effect upon the prothrombin activity. As soon as the patient is controlled, heparin can be discontinued.

Doctor Eddy: Doctor Vargas, what anticoagulant do you use for the long-term cases?

Doctor Vargas: Is this question asked relating to surgical treatment of chronic cases? If so, then the answer is that I don't use any.

Doctor Eddy: I assume that possibly it refers to persons who have thrown off the emboli. Doctor Goldowsky, what drugs do you use for prolonged clotting control for long-term cases?

Doctor Goldowsky: I think that I have answered the question of anticoagulation. I think that whatever it would be used for the same method would be implied, although some may prefer to continue heparinization for a longer period.

I think that I have already stated, and I know the other members of the panel agree, that there is little indication for post-operative anticoagulation following surgery for chronic occlusive disease. How-

continued on next page

ever, I think that when the operation in a specific case is thrombo-arterectomy, heparin is indicated for forty-eight to seventy-two hours. Would you comment on that, Doctor Vargas?

Doctor Vargas: The most important thing to keep the blood vessel open is to do a pretty thoroughly accurate job. If the velocity of blood flow is high and the patient's central circulatory sytem is intact, maintaining a good head of pressure, the area in the vascular system that has been operated upon will stay open. If one must resort to anticoagulants, temporarily, to keep the segment of the vessel open, you are almost committed to doing this permanently. At least in our hands the results are very poor.

We were anticoagulating, until we had a rather severe hematoma in a fairly important patient, a relatively young woman. This did not end disastrously, but it was a nerve-wracking experience, and one which could have been bad. I subsequently have not used anticoagulants, and the patients have done reasonably well.

I think that in terms of long-term anticoagulation, we see it more frequently in the management of the patients who embolize, where the primary disease is heart disease. There, dicumdrol is used; but, usually, we recommend that the heart be operated upon, and the entire problem handled in that way.

Doctor Eddy: Doctor Hoye, here is a good question for you. Thus far, I have heard no mention of abstinence from tobacco, in the long-term care of peripheral arteriosclerosis.

Doctor Hoye: The only reference that I had made to tobacco was in the small portion of the end of my talk which I had to cut short. I would say that in the over-all field of the disease, the relationship between symptomatology and tobacco is poorly spelled out at the present time. Most people in this field do feel that in individual patients there is some relationship to the small vessel pathology, as seen clinically. More specifically, I firmly believe in a clinical entity known as Buerger's Disease, in which a good percentage of the patients will have a reversion of symptoms upon the cessation of tobacco.

In the sixty- and seventy-year-old patients with arteriosclerosis obliterans, I feel that the percentage of success upon cessation of tobacco probably is not adequately documented at the present time to make it a widespread therapeutic measure.

Doctor Eddy: Here is a question directed to Doctor Vargas. What do you do to prevent kinking of the graft in the popliteal space?

Doctor Vargas: We had it occur badly on one patient so that we were forced actually to take down the distal anastamosis and do it over again, putting the graft up farther.

I think that with increasing experience you get to know how to pull on the graft. These are crimped grafts, and they will give. They come in a commercial package, and will give up to six or seven inches. Before completing the anastamosis it is essential to put the graft on the stretch, and carefully check it for kinking before the graft is completed. All of these grafts need just a little bit of tension and they will do very well.

Doctor Eddy: Here is a very good question. A physician would like to know what the home medical treatment is in nonoperative cases.

That is a shocking thought, but a thought, nevertheless. There are many such cases at home, and they need medical treatment. They have occlusive disease. I think that in the first place, we should realize that vasodilating drugs have little or no place in this particular problem. They do have a place in the vasospastic disorders, such as Raynaud's Disease and its associated diseases.

But, in true occlusive disease, vasodilating drugs many times do more harm than good. They are not specific to the point of obstruction. The dilatation takes place throughout the body, affecting all of the blood vessels. As a result the blood pressure is frequently dropped, and many times the extremities are harmed rather than helped with their use.

I should like, also, to bring out the point that in acute occlusion one should get the patient to the hospital promptly. The best time to treat these patients is early. If one gives anticoagulant therapy and thinks that morphia, or demerol, or some such pain-killing drug will tide them over for further observation, they are doing the patient great harm. All patients who have sudden, acute episodes should be promptly hospitalized and seen by a competent vascular surgeon.

As for the home medical treatment of the chronic cases, that are nonoperative for one reason or another, I believe that great attention should be directed to the care of the feet. They should wear heavy, woolen socks; the nails should be carefully cared for. They should be told that under no circumstances should they try local treatment, such as the application of heat or cold, or various solutions such as mercurochrome or lysol. Many patients will burn themselves by treating themselves.

The head of the bed should be elevated, so that the feet will be low in relation to the heart, causing congestion in the lower extremities. This keeps the blood there that much longer, relieving the pain. Frequently, Empirin compounds with codeine and bed rest will do a lot for these people.

If they continue to have pain in spite of this sort of therapy, then they are probably candidates for amputation. Certainly, they should be hospitalized for further investigation.

Doctor Vargas: What do you think of Buerger's exercises in home treatment?

Doctor Eddy: I have never been a great advocate myself of Buerger's exercises. I know that many people use them. One recent development is a bed, which will tilt electrically, to help in this sort of a situation. I have never personally done that, nor have I been impressed by it.

Doctor Goldowsky: I should like to stress the dangers of applying heat to ischemic extremities, either in the home or in the hospital. We still see people putting hot water bags on ischemic extremities. Of course, it is extremely hazardous because of possible burns. Patients with inadequate circulation are unable to dissipate the heat, and are actually increasingly susceptible to burns. If you want to put anything on, an ice bag is preferable.

With respect to the late treatment of emboli, the earlier the patients are treated, the better; but I think there is a converse situation, namely, that delay no longer is a contraindication to treatment. They can be treated many hours, and even days, later, as demonstrated in our series.

The longest in our series was five days, and, as Doctor Vargas mentioned, one of eight days. Cases have also been reported in the literature as late as eight days.

Doctor Hoye: If it is impossible to get a patient to a hospital these methods may provide further leeway in operating on these cases successfully.

Doctor Eddy: I think there is a feeling now that aortography is not being used as much as it used to be. Certainly you avoid using it in aneurysms for the obvious reasons that an aneurysm might be traumatized, and very often it is not necessary in establishing a diagnosis; but, where there is a question of doubt, it can be valuable. In blocks below the aorta, especially segmental blocks of the iliacs, much valuable information can be obtained.

I believe that it is important to get as much preoperative information as possible about the circulation, such as blocks above and below, and for this reason aortography, of course, still has an important place.

Providence Medical Association Meeting

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AN UNUSUAL CAUSE OF GASTROINTESTINAL HEMORRHAGE

Systemic Neurofibromatosis With Involvement of the Duodenum*

ROBERT L. CURRAN, M.D., AND THOMAS FORSYTHE, M.D.

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THE DIFFERENTIAL DIAGNOSES of gastrointestinal bleeding can usually be made on a clinical basis. In a recent cumulative review the following incidence of various causes of gastrointestinal bleeding was reported:[1] peptic ulcer, 65 per cent; gastritis, 11 per cent; esophageal varices, 9 per cent; hiatus hernia, 2 per cent; gastric carcinoma, 1 per cent; other causes, 2 per cent, and undetermined site, 10 per cent.

Among the rare causes of gastrointestinal hemorrhage may be listed:[2,3] blood dyscrasias, aortic aneurysms rupturing into the gastrointestinal tract, hereditary hemorrhagic telangiectasia (or other angiomatous conditions of the intestines), Meckel's diverticulum, small bowel tumors of multiple types, choristoma of the gall bladder (ectopic gastric mucosa), collagen diseases, sarcoidosis, amyloidosis and pancreatic disease, both malignant and inflammatory.

Neurofibromatosis is an uncommon disease. Associated small bowel involvement is an exceedingly rare complication of this disease. Rivers et al.[4] reviewed the entire world literature up to 1954 concerning benign tumors of the small intestine and found only 90 reported cases of neurogenic tumors. Only 13 of these were associated with generalized neurofibromatosis. A cursory review reveals several other articles pertaining to this disease complex.[2,3,5-9]

Case Report

E. P. A fifty-six-year-old white female entered Rhode Island Hospital on October 25, 1959 with a three-day history of melena associated with lightheadedness and dyspnea. The history was negative for ethanol ingestion, epigastric distress, known peptic ulcer, use of antacids, hematemesis, or a history compatible with a blood dyscrasia.

Past history revealed the onset of generalized cutaneous neurofibromatosis at age 30, a left nephrectomy performed at another hospital in 1951, for which the pathological report was chronic and acute pyelonephritis, and a left salpingo-oophorectomy in 1931 for unknown reasons.

She was admitted first to this hospital on March 9, 1959 with a history of melena. Her admission laboratory studies revealed a hemoglobin of 4.6 grams per cent, hematocrit 15, white blood count 10,700, polymorphonuclear leukocytes 78, lymphocytes 22, and a negative urinalysis. Subsequent studies included blood urea nitrogen 15 mg. per cent, bromsulfalein retention 18 per cent, alkaline phosphatase 7.3 King-Armstrong units, prothrombin activity 75 per cent, total protein 7.3 gm. per cent with albumin 4.4 gm. per cent, platelet count 252,000, bilirubin 0.81 mg. per cent total with direct 0.04 mg. per cent, serum fibrinogen 0.77 gm. per cent, Coombs' test negative direct and indirect, electrocardiogram within normal limits, and a normal chest X-ray.

Stool benzidine was 4 plus. Excluding hemorrhoids, rectal and sigmoidoscopic examinations were negative. A barium enema showed diverticulosis of the distal colon. A gastrointestinal series was reported as demonstrating only a small, sliding hiatus hernia. An intravenous pyelogram revealed nonvisualization of the left kidney with compensatory hypertrophy of the right kidney. Surgical opinion was that, having failed to demonstrate the site of the hemorrhage, the obvious pathology should be treated. On the patient's tenth hospital day, a repeat sigmoidoscopy and hemorrhoidectomy were performed.

During her post-operative course the hemoglobin slowly fell. Stool was positive and gastric aspirate negative for occult blood. Repeat barium enema and gastrointestinal series were reported as unchanged from the initial examinations. After a thirty-two-day hospital stay the patient was discharged on April 10 on a low residue diet and oral iron. Further studies, such as exploratory laparotomy, were deferred.

Her second admission was on April 24, 1959. Once again melena was the presenting complaint. An unchanged physical examination, serial negative stool benzidines, hemoglobin of 12.5 and hematocrit

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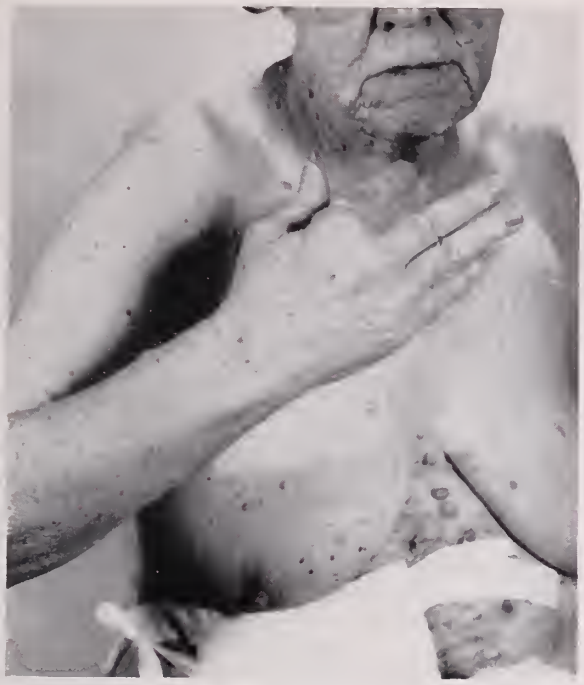


FIGURE 1
Photograph of the patient demonstrating multiple cutaneous neurofibromata and café-au-lait spots.

of 39, which were significantly higher than on discharge, resulted in the melena being ascribed to the oral iron therapy. She was discharged after three days.

Family history revealed neurofibromatosis in both parents and four sisters.

Physical examination: B. P. 140/80. P. 120. T. 101° per rectum. A thin, white female appearing older than her stated age, with obvious pallor of her skin and mucous membranes. The skin showed multiple soft, sessile, well-circumscribed tumors, varying in size, present over the entire body. Café-au-lait spots were also seen in large numbers. See Figure 1. Telangiectasia, ecchymosis, buccal or labial pigmentation were absent. Other physical findings included dental caries, Grade I fundoscopic changes, a Grade I (1/6) systolic murmur along the left sternal border, negative pulmonary findings, slight epigastric tenderness, and a negative rectal examination.

The stool was positive and gastric aspirate negative for occult blood. Admission hemoglobin was 6.6 with a hematocrit of 19.5. Other laboratory findings: urinalysis negative, glucose 101 mg. per cent, blood urea nitrogen 49 mg. per cent, creatinine 1.3 mg. per cent, platelets 214,000, bleeding time 30 seconds, and clotting time 13 minutes.

A third gastrointestinal series was performed. The small, sliding hiatus hernia described previously was again noted. In addition, however, a sharply circumscribed lesion was seen projecting into the lumen of the duodenum at about the junction of its descending and transverse portions, just below the usual location of the ampulla of Vater. The tumor was smoothly rounded, measured 2.5 cm. in diameter, and appeared intramural, extramucosal in type. On many of the films a small, irregular, central ulceration was noted. Review of the films of the gastrointestinal examinations performed in March and April, 1959, demonstrated the tumor. See Figures 2 and 3.



FIGURE 2
Film of the upper gastrointestinal tract showing the sliding hiatus hernia and the lesion involving the lower descending portion of the duodenal loop.



FIGURE 3
Spot film of the duodenal neurofibroma showing the irregular central ulceration.

At laparotomy on October 29, 1959 the tumor demonstrated by X-ray was readily identified. An additional small 1 cm. tumor was found immediately proximal to the larger lesion. Frozen section was reported as consistent with a leiomyoma. The surgeon, therefore, elected to perform a local resection with end to end anastomosis. The suture line

continued on next page

jeopardized the ampulla of Vater and for this reason the common bile duct and pancreatic duct were reimplanted into the duodenum. T-tube drainage of the common bile duct as well as a gastrostomy were performed.

The postoperative course was complicated by mild icterus. On the fifth postoperative day the bilirubin rose to 5.9 mg. per cent and the alkaline phosphatase to 29 King-Armstrong units. A T-tube cholangiogram on the tenth postoperative day showed normal biliary radicles and unobstructed passage of dye into the small intestine. The T-tube was removed on the twelfth postoperative day and the gastrostomy tube on the sixteenth postoperative day. A gastrointestinal series on November 23, 1959 showed moderate narrowing at the site of the duodenal anastomosis. No evidence of fistulization was observed.

The patient's convalescence was otherwise uneventful and she was discharged on November 27, 1959. At follow-up examination seven months later the patient was doing well.

Gross pathologic examination revealed an extramucosal intramural mass measuring 3 cm. in diameter protruding 0.7 cm. above the mucosal surface of the duodenum. On the mucosal surface of the mass there was a 0.7 cm. in diameter ulceration with a firmly adherent blood clot. A small, 1 cm. in diameter, nodule was present just proximal to the first tumor (Figure 4).

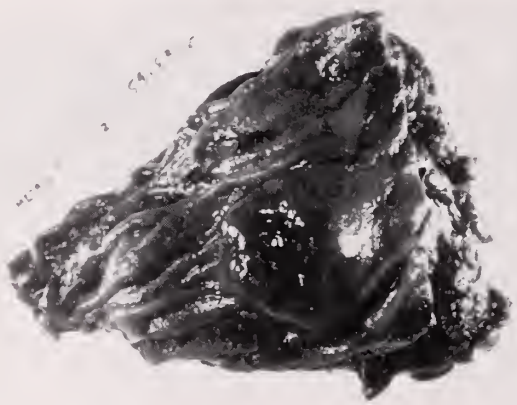


FIGURE 4

Photograph of the gross specimen showing the larger intramural extramucosal tumor with central ulceration.

On microscopic examination the tumor consisted of uniform, spindle-shaped cells arranged in bundles. There was occasional palisading. Phosphotungstic acid hematoxylin stain demonstrated fine fibrils which were distinctly different from the myofibrils of the adjacent, smooth muscle. Microscopic examination of the small bowel tumors and skin lesions excised at the time of surgery were virtually identical, so that the bowel tumors were considered to be neurofibromata rather than leiomyomata (Figures 5, 6).

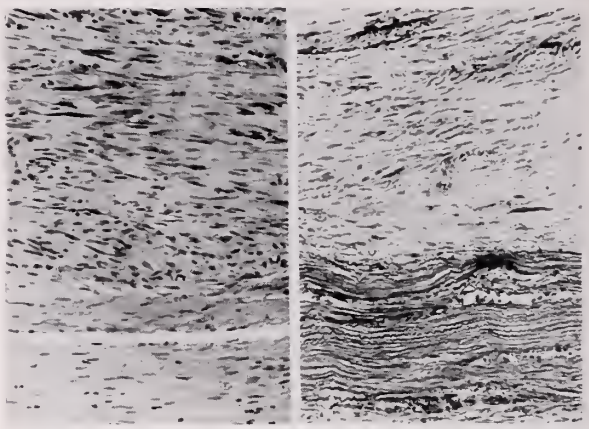


FIGURE 5

Photomicrograph H&E stain 600X. Portion of duodenal tumor above sharply demarcated from the intact muscularis below (*left*).

FIGURE 6

Photomicrograph PTAH stain 1000X. Portion of same tumor shows distinctly different fibrillary pattern from the normal muscularis propria below (*right*).

Discussion

Neurofibromatosis involving the gastrointestinal tract is a rare finding. As in the case described, the blood loss usually occurs as a consequence of progressive thinning and subsequent ulceration of the mucosal lining of the gastrointestinal tract by a progressively enlargening, intramural tumor mass. It is conceivable, as with other intramural, small bowel tumors, that neurofibromata could be a cause of intestinal obstruction due to mechanical involvement, the lead point of an intussusception, or part of a volvulus if a fibrous attachment to an extraintestinal structure exists.

When seen in association with generalized neurofibromatosis, involvement of the intestinal tract is usually multifocal. Multiple tumors of varying size and shape may be seen at irregular intervals along the entire length of intestine. Even at laparotomy it may be difficult to localize the site or sites of bleeding. If resective surgery is performed, sufficient bowel must be left to avoid development of a malabsorption syndrome.

Radiographically, a benign neurogenic tumor of the duodenum appears as an intramural, extramucosal lesion. It is sharply circumscribed, arises from one wall and projects into the lumen of the bowel as a rounded, somewhat lobular, filling defect. There are no radiologic features which would serve as points of differentiation from benign, small bowel tumors of other types. The coexistence of a small bowel lesion having the previously described characteristics and neurofibromatosis suggests the diag-

nosis of neurofibroma of bowel, despite its rarity.

On Roentgen examination the lesions of the small bowel are often inconspicuous, not easily demonstrated, and occasionally missed. This is particularly true in the jejunum and ileum where many areas are intermittently obscured during a small bowel examination by adjacent barium-filled loops. The small size of the tumors adds to the problem. The duodenum, however, is visualized more readily, and should be carefully scrutinized fluoroscopically as part of every roentgenologic examination of the upper gastrointestinal tract. This, together with multiple films, should uncover most tumors involving the small intestine.

Neurofibromatosis may first be manifested by specific complications in other areas. The tumor may occur in any organ or tissue. More common locales for difficulty resulting from systemic neurofibromatosis are: mediastinum, brain stem — in particular the acoustic neurinoma, spinal cord, and bones[10] where many types of lesions may occur. Another problem is presented by an estimated 10 to 15 per cent of cases that develop sarcomatous changes in the neurofibromata.[11]

SUMMARY

An unusual case of gastrointestinal hemorrhage secondary to systemic neurofibromatosis with visceral involvement of the gastrointestinal tract is presented. The literature is briefly reviewed.

The authors gratefully acknowledge the assistance of GEORGE MEISSNER, M.D., *associate pathologist* at the Rhode Island Hospital, in the preparation of this study.

REFERENCES

[1]Gray, S.; Olson, T.; and Manrique, J.: Hematemesis and Melena. Med. Clinics No. Amer. 41:1327, 1957

[2]Brick, I. A.; and Jeghers, H. J.: Gastro-intestinal Hemorrhage (Excluding Peptic Ulcer and Esophageal Varices). New Eng. J. Med. 253:458, 511, 555, 1955

[3]Pessel, J. F.; Beairsto, E. B.; Wise, J. S.; Edwards, M. H.; Scarovelli, G.; and Rathmell, T. K.: Unusual Causes of Gastro-intestinal Hemorrhage. Gastroenterology 31:538, 1956

[4]Rivers, L.; Silverstein, J.; and Tope, J. W.: Benign Neoplasms of the Small Intestine: A Critical Comprehensive Review with Reports of 20 New Cases. Int. Abst. Surg. 102:1, 1956

[5]Grill, J.; and Kuzma, J. F.: Recklinghausen's Disease with Unusual Symptoms from Intestinal Neurofibroma. A.M.A. Arch. Path. 34:902, 1942

[6]Farrar, T. F.; and Chappell, F. W.: Severe Gastrointestinal Hemorrhage Resulting from Recklinghausen's Disease. A.M.A. Arch. Surg. 79:106, 1959

[7]Gompertz, M. L.; and Gourley, R. D.: Follow-up Observations on Patients with Upper Gastro-intestinal Hemorrhage of Undetermined Etiology. Gastro-enterology 32:528, 1957

[8]Kleitsch, W. P.; Kehne, J. A.; and Gutch, C. F.: Gastrointestinal Hemorrhage Due to Neurofibromatosis. J.A.M.A. 147:1434, 1951

[9]Walker, P. E.: Neurinoma of the Small Intestine. Amer. J. Clin. Path. 19:827, 1949

[10]Levene, L. J.: Bone Changes in Neurofibromatosis. A.M.A. Arch. Internal Med. 103:570, 1959

[11]Preston, F. W.; Walsh, W. S.; and Clarke, T. H.: Cutaneous Neurofibromatosis (von Recklinghausen's Disease): Clinical Manifestations and Incidence of Sarcoma in 61 male patients. A.M.A. Arch. Surg. 64:813, 1952

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"Miracles" like these and "higher hospital costs" go together. You can't have one without the other.

Working miracles on order demands specialized new equipment. It's complicated and it's expensive. Just a "blood pump" and a sterilizer, for example, cost more than an eight-room house. Machines are supposed to cut down manpower. In industry, they do. But not in hospitals. Here they boost it, call for more help—for specially trained technicians.

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... Actually, it is only because of high standards, careful managing, and a real dedication that hospital costs aren't far higher. Everything considered ... hospital service today is a bigger value than ever... the truth about hospital costs is —"miracles cost money!"

... Walter F. Perkins, Industrialist; President, Board of Trustees, The Johns Hopkins Hospital, Baltimore, Maryland.

Editorials

PERIPHERAL VASCULAR OCCLUSIVE DISEASE

This issue of the Journal has been devoted largely to a symposium on Peripheral Vascular Disease presented before the one hundred and fiftieth anniversary meeting of the Rhode Island Medical Society in May, 1961. An excellent panel consisting of five Rhode Island surgeons experienced in the management of vascular problems discussed various aspects of the pathogenesis, diagnosis, and treatment of acute and chronic occlusions. The most advanced concepts regarding these disorders and their surgical and medical management were outlined. A balanced view regarding the true value of surgical procedures was maintained without losing sight of the brilliant results which are at times possible by direct approach to the vessels. These papers, despite their optimistic tenor, leave no doubt that ultimate success in these diseases must come from metabolic advances rather than from some unforeseen surgical breakthrough.

The competence of these presentations has caused us to ruminate about some other matters. We feel that the Rhode Island medical community has most certainly come of age when it can put on the platform five mature practitioners in an area as specialized as this, yet have sufficient depth to field another team of experts in the same specialty of equal size and equivalent experience and judgment. This presentation was a highly professional job which, despite its indigenous origins, was quite on a par with those regularly staged before us by visitors from university centers. It reminds us of that old saw about an expert being a - - - - from out of town with a box of slides.

One other thought occurs to us. There are actually very few clinical fields in which this could not be done or in which, furthermore, a prospective medical school will find this community wanting. Perhaps its founding fathers will be well advised not to consider Rhode Island a vacuum but rather to look around locally for a little sensible advice.

EDUCATION IN A FREE SOCIETY AND CLASSICAL HIGH SCHOOL OF PROVIDENCE

Before the recent Congress of the American College of Surgeons, held in Chicago in October, Admiral Hyman Rickover of atomic submarine fame delivered some pungent and vigorous comments on his favorite theme, *Education in a Free Society*. He observed, "I am aware that the topic of my speech—*Education in a Free Society*—falls neither in your professional specialty nor into mine. But it is a public issue of grave import." "Our country's need for educated people is great," he added. "We must not sacrifice it to our obsessive desire that children be spared the experience of discovering that some others are brighter than they. . . . Two of the progressive dogmas that have greatly damaged our children should be abandoned forthwith," the right to choose what they wish to study at the expense of a carefully planned sequential study program, and "The pernicious progressive notion . . . that democratic schools must 'educate the whole child. . . .' There is implicit in it the intent to use the school as a social agency, as a tax-supported instrumentality for equalizing differences in home backgrounds." He climaxed his remarks with this blockbuster: "Scholastic standards are rising, but unfortunately at a snail's pace. If we want to be competitive educationally with other advanced nations, we shall have to put an end to the substitution in our public schools of life-adjustment and vocational training for basic education. Such courses as 'How to be Likeable, Loveable, and Dateable,' how to arrange a wedding, manage the family budget, and all the trivia so dear to educational progressives, will have to be taught after hours, *if at all*. The traditional division of educational responsibilities between home and school must be restored."

As Admiral Rickover emphasized, the problem of secondary education does not fall either within his professional purview, nor within ours. But as physi-

cians we nevertheless have a twofold concern with this problem. More specifically as it forms the basis for a sound and well-rounded medical education, and more generally as a means of preparing well-educated citizens for the growing demands of modern society.

In this connection we have watched with unconcealed dismay the attempts over the years to destroy or dilute the standards maintained for generations in the hallowed, if somewhat dusty, halls of Classical High School of Providence, Rhode Island. It is true that Mr. James Bryant Conant has selected that traditionally American institution, the comprehensive high school, as the vehicle for strengthening American high school standards. But, a product himself of Roxbury Latin School and Harvard College, he has been unwilling to recommend that the established Latin schools of the Eastern Seaboard be liquidated. Recent news reports indicate that, with federal aid, a new Classical High School will be built to replace the present obsolete structure. Furthermore, Mr. James L. Hanley, superintendent of schools in Providence, is to be congratulated for recommending that the ninth grade be continued at Classical, despite pressure from the junior high schools which feel that their best students are siphoned off by this procedure. Mr. James K. Sunshine recently commented in the PROVIDENCE SUNDAY JOURNAL (October 8, 1961) that "Classical is not just another high school. It has . . . an enormous reputation among parents, alumni and colleges that is largely well-deserved, and a forceful magic that coaxes the best from pupils in a way that is unmatched by any other school in the state and probably by few in any other state." He added, however, that "it is also an educational anachronism that has barely noticed the real accomplishments of the last decade. Fearful of the 'life adjustment' and other exotic movements of the twentieth century, it has clung rigidly to the nineteenth."

It is difficult, particularly in view of the apparently increasing modern requirements for earlier and better training in mathematics and science, to disagree entirely with Mr. Sunshine's observation that "The basic issue . . . is whether Classical shall be changed in *any* way. In the light of all that has happened in education and in the recognition of the nation's need for it in the last ten years, there is no real reason to believe that Classical's limited program is above change." We must not, however, in our zeal for change throw out the baby with the bath.

COMPUTERS AND MEDICINE

A COMPUTER CENTER at Brown University and increasing references to computers in medical science signal the advent of computers in clinical practice.

What a computer can and cannot do is not generally understood. A computer calculates any mathematical operation known to man regardless of how complex, and does it in seconds. Since all logic is reducible to mathematical formulation, all logical problems are rapidly solved by a computer.

Diagnosis and treatment are logical problems and hence soluble by a computer in seconds. In clinical practice only the organization of our data into logical sequences of reasoning called programing is needed to make computers of immeasurable clinical value. In several branches of medicine a good start has been made and we may expect the literature to reflect these beginnings.

Examples will illustrate computer use. Diagnosis is a science of probabilities wherein a set of physical findings are correlated with several possible structural changes (pathology). The best probability is the best diagnosis. The human brain as a computer does this. The better the diagnostician, the better human computer he is. Since the process is logic, it is mathematical and may be done by a machine. The machine will do it rapidly and accurately, if fed all the data once a program has been developed. It is in programing that our current need is greatest. An extension of technology will permit many of the observations needed in diagnosis to be fed directly into the computer. A highly developed polygraph is the prototype. Pulse, temperature, blood pressure, and respirations are examples of data which can be obtained automatically and fed directly into a computer. Pain, weight loss, and historical items would be recorded on devices similar to punch cards. All the information is logically and mathematically weighted by the machine and a list of possible diagnoses with their relative probabilities obtained at almost instantaneous speed. A single computer, central in location, might well handle data from physicians' offices fed in by telephone connections.

Ideal treatment is based on many variables—age, sex, life expectancy, idiosyncrasy, drug toxicity, and all the factors a physician integrates in arriving at treatment. Logically the physician chooses a strategy of therapy. This strategy is easily reduced by logical analysis to mathematical calculation. We seldom do it in practice because of the complexity and time involved. A computer negates all complexity and time factors. Therapy and therapeutic strategy will be improved greatly. An extension of automatic observations by polygraphs, for example, will simplify anesthetic administration and may in fact make possible automatic administration. The use of computers in dialysis and artificial kidney regulations is obvious. The possibilities of its use are

continued on next page

endless.

The image and function of a physician will not change by the use of computers. By opening up new fields of study and application more, not fewer, doctors will be needed. Printing, communication advances, speed of travel, synthetic drugs, all have merely added to the excitement and thrill of medical practice. New excitement and adventure comes with the prospects of widespread computer applications in medicine.

PILGRIMAGE TO PADUA

EVERYONE goes to Venice. Its eternal charm and color have attracted visitors for five hundred years. Indeed it is said that ten million travelers a year find their way to its teeming canals and its spacious and impressive Piazza San Marco. No more than eighteen miles away, or forty-five minutes by bus over a modern auto strada, lies Padua, a modest town, but infinitely more important in the annals of medicine; yet by contrast barely a few thousand devoted pilgrims find their way to its historic shrines. Whereas Venice did not even exist in Roman times, Padua, known as Patavium, was, in these days, one of the richest cities of Northern Italy, and was in fact the birthplace of Livy, the great Roman historian. In later times it was the residence of Dante and of the painter Mantegna, and known to modern readers because Shakespeare's shrew was tamed there.

The art treasures of Padua, while not lavish in their profusion, have great importance in the history of Italian art. In the center of the town stands the imposing Palazzo della Ragione, teeming with some four hundred frescoes painted by the followers of Giotto, and the modest Scrovegni Chapel, the interior of which is covered with frescoes by Giotto himself, painted in 1305 and 1306, and generally regarded to be his greatest work.

But to the medical pilgrim the university is the focus of interest. The University of Padua was founded in 1222 by teachers and students who had fled because of oppressive treatment from Bologna, the oldest university in Europe. The students did not immediately find their new hosts more accommodating; but they lingered on and eventually the school prospered. As early as the fourteenth century dissection was practiced at Padua, but did not receive official sanction until 1429, twenty-four years later than Bologna. In fact at that time Bologna was conceded to be the world's center of anatomical learning. However, beginning with the sixteenth century Padua assumed unquestioned leadership. Gentile Foligno, a graduate of Bologna, went to Padua in 1327 as professor of medicine. He carried out public dissections and performed autopsies. He was the author of *Concilia Contra Pestilentiam*, a disease to which he himself eventually succumbed in 1348. Following him was a



long line of brilliant teachers and students, the like of which few medical schools can boast. Among them were Thomas Linacre, founder of the Royal College of Physicians of London and physician to Queen Elizabeth; John Caius, nine times president of the Royal College of Physicians of London, and substantial benefactor of his college at Cambridge University; Vesalius, the greatest anatomist of his age; Fallopio; Fabrizio (Fabricius); the ageless William Harvey; Fracastoro, best known for his poem, *Syphilis sive morbus gallicus* (which changed the name of "the French disease to syphilis"); culminating in the great eighteenth century physician and anatomist, Giovanni Battista Morgagni, justly famed as the Father of Pathology. First edition folio copies of his classical *De Sedibus et causis Morborum*, incidentally, can be found in the library of the Rhode Island Medical Society.

In 1501 the various halls of study of the University were gathered together in the present building, now located in the center of downtown Padua. This edifice, called Il Bo because there was formerly a hotel there with the sign of an ox, presently houses only offices of the University, the modern schools of the various faculties now being located elsewhere in town. Albertus Magnus, Galileo, and Morgagni all taught in this building. One of its historical treasures is the crude podium from which Galileo, the greatest mathematician of his day, taught his devoted students. The goal of all medical visitors is the anatomical theater, preserved for all posterity

with loving care. Built in 1544 by Fabricius at his own expense, it is the very oldest anatomical theater in Europe. Constructed of wood, and not large, it is characterized by circular galleries, stacked tier on tier, so narrow that the students were obliged to stand, yet able by the same token to look down vertically upon the cadaver virtually from above. Also to be seen is the passage through which the corpus was introduced. Morgagni, too, taught anatomy in this room.

Indeed the shades of the great stalk the halls of historic Il Bo.

INERTIA, NEWTON, AND SAFETY BELTS

THE AUTOMOBILE MODELS for 1962, recently unveiled, have been equipped with attachments for safety belts. Injury and death may be reduced an estimated 50 per cent by the use of the belts. Newton's law states that a body in motion continues in motion until acted upon by an opposing force. A safety belt applies the opposing force to the abdomen and pelvis, where relatively little injury will be sustained. This contrasts with that caused when the body is hurled through a sprung door or open window, allowing the head to hit a tree or other obstacle. Things at rest remain at rest until inertia is overcome. There has been considerable inertia in accepting seat belts. The American Medical Association, the United States Public Health Service, the American College of Surgeons, the National Safety Council, and many state legislatures have been instrumental in securing the inclusion of the standard attachments in 1962 automobiles.

This is barely a beginning. Even by 1963 less than 10 per cent of all cars will be equipped, and the death and injury toll will be down a mere 5 per cent. We will still have a job to do in promoting installations in the ninety per cent of cars without protection. By continuing our support of safety belt installations the momentum will be applied to the program, and not to our patients.

THE EIGHTH OLDEST STATE MEDICAL ASSOCIATION

AS WE APPROACH the sesquicentennial year of the Rhode Island Medical Society we continue to discover new data regarding the development of the state medical associations in the nation, a development that has apparently received very little historical study. For many years records were published to indicate that our organization was the ninth oldest state group, but our researcher now indicates clearly that we are properly and rightfully the eighth oldest state medical association.

The previous confusion on the matter stemmed from the fact that so-called "state" societies were initiated in some parts of the country that were not true state societies. For example, in Charleston, South Carolina, on December 24, 1789, there was instituted a medical society of South Carolina which, however, was composed of physicians of Charleston. They subsequently, in 1847, voted that "a committee be appointed to invite the individual members of the Medical profession throughout the State, by the printing of a circular, to assemble in the city of Charleston, on the 14th day of February, 1848, for the purpose of organizing a State Medical Society."[1]

On the designated February date the South Carolina Medical Association was organized, and the Medical Society of South Carolina (Charleston) became one of its constituent societies. In 1907 the Charleston County Medical Society took the place of the older organization as the constituent body.

A similar situation wherein a city group utilized a state society title was that of the Georgia Medical Society of Savannah which was incorporated in 1804, and then became a constituent society of the Medical Society of the state of Georgia, the official state association when it was organized in 1849.

Exhaustive research, therefore, conclusively establishes the following historical order of organization of state medical associations that have maintained continuous existence:

1766—The Medical Society of New Jersey
1781—The Massachusetts Medical Society
1789—The Medical Society of the State of Delaware
1791—The New Hampshire Medical Society
1792—The Connecticut State Medical Society
1798—The Medical and Chiurgical Faculty of the State of Maryland
1807—The Medical Society of the State of New York
1812—The Rhode Island Medical Society

[1] South. J. Med. & Phar. 2:724, 1847

HOUSE OF DELEGATES
of the
RHODE ISLAND MEDICAL SOCIETY
Report of Meeting Held September 27, 1961

A MEETING of the House of Delegates was held at the Rhode Island Medical Society Library on Wednesday, September 27, 1961. The meeting was called to order by the President, Doctor Samuel Adelson, at 8:10 P.M. The following were in attendance:

BRISTOL COUNTY: Robert W. Drew, M.D. *KENT COUNTY:* Peter C. Erinakes, M.D.; Edmund T. Hackman, M.D. *NEWPORT COUNTY:* Philomen Ciarla, M.D.; Charles Dotterer, M.D. *PAWTUCKET DISTRICT:* Walter J. Dufresne, M.D.; Earl Kelly, M.D.; Robert C. Hayes, M.D.; Francis E. Hanley, M.D., and Edward J. Butler, M.D. *WASHINGTON COUNTY:* Freeman B. Agnelli, M.D.; James A. McGrath, M.D. *WOONSOCKET DISTRICT:* Joseph A. Bliss, M.D. *OFFICERS OF THE RIMS* (other than delegates): Samuel Adelson, M.D.; Arthur E. Hardy, M.D., and J. Murray Beardsley, M.D. *STATE HEALTH DEPT. DIRECTOR:* Joseph E. Cannon, M.D.* *IMMEDIATE PAST PRESIDENT OF RIMS:* Earl J. Mara, M.D. *PROVIDENCE MEDICAL ASSOCIATION*: Robert R. Baldridge, M.D.; John T. Barrett, M.D.; Irving A. Beck, M.D.; J. Robert Bowen, M.D.; Bertram H. Buxton, Jr., M.D.; Wilfred I. Carney, M.D.; Francis H. Chafee, M.D.; Harry E. Darrah, M.D.; Michael DiMaio, M.D.; Henry B. Fletcher, M.D.; Warren Francis, M.D.; Frank Fratantuono, M.D.; J. Merrill Gibson, M.D.; John F. W. Gilman, M.D.; Seebert J. Goldowsky, M.D.; Stanley Grzebien, M.D.; John C. Ham, M.D.; Waldo O. Hoey, M.D.; Walter S. Jones, M.D.; Robert V. Lewis, M.D.; Frank C. MacCardell, M.D.; William J. MacDonald, M.D.; William S. Nerone, M.D.; Francis W. Nevitt, M.D.; Arnold Porter, M.D.; William A. Reid, M.D.; Ralph D. Richardson, M.D.; Carl S. Sawyer, M.D.; Stanley D. Simon, M.D., and John Turner II, M.D.

ALSO PRESENT: Jesse P. Eddy, M.D., chairman, Scientific Work Committee; Harold Williams, M.D., chairman, Committee on Mental Health, and John E. Farrell, SC.D., executive secretary.

Report of the Secretary

Doctor Michael DiMaio, secretary, noted that his report was included in the handbook.

Action: A motion was made, seconded and passed that the report of the secretary as presented in the handbook be received and placed on file.

Report of the Treasurer

Doctor J. Murray Beardsley stated that his complete report on the investment program, and a tentative budget for 1962, were included in the handbook, and he was prepared to discuss any item for the delegates.

Action: A motion was made, seconded and adopted that the report of the treasurer as submitted be approved and placed on file.

Recommendations for the Council

Doctor Adelson noted that the Council had submitted two recommendations, as follows:

I. The Council recommends that Doctor George W. Waterman, whose term as a trustee of the Benevolence Fund of the Society terminates this year, be reappointed for a three-year term to end in 1964.

Action: The adoption of the recommendation was moved, seconded and passed.

II. The Council recommends that the annual dues for 1962 for active members of the Society more than one year in medical practice be $50, and for members in their first year of practice, $25.

Action: The adoption of the recommendation was moved, seconded, and passed.

Communications

I. A communication from the state department of health relative to a glaucoma detection program, included in the delegates' handbook, was reviewed. Doctor Cannon, state director of health, favored the suggestion that the matter be considered by the ophthalmologists of the state.

Action: A motion was made that the proposal for a glaucoma detection program by the state department of health be referred to the Rhode Island Ophthalmological Society with the request that such society report to the January, 1962, meeting of the House of Delegates with recommendations regarding the proposal. The motion was seconded and passed.

* * *

*Without the power of vote.

continued on page 654

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HOUSE OF DELEGATES

continued from page 652

II. A communication from Doctor Herman A. Lawson noting his resignation as chairman of the Rhode Island Advisory Committee to the Selective Service System, and asking that the Society nominate three physicians to the executive secretary of the National Committee from whom he would select one to be the new Rhode Island chairman.

Action: A motion was made that the House name Doctors Morgan Cutts, Wilfred I. Carney and Waldo O. Hoey, leaving to the discretion of the president of the Society the naming of an alternate should either of these three physicians withdraw from the appointment. The motion was seconded and passed.

Sesquicentennial Committee

Doctor Arnold Porter, speaking for Doctor Thomas Perry, chairman of the Sesquicentennial general committee, reported on the plans in progress for a Citizens Committee, and school tour program of the Health Exposition, a special supplement in the PROVIDENCE SUNDAY JOURNAL, the special assessment imposed by the Society on the members to be paid in October, 1961, the work of the Exposition committee, and the plans for an historical supplement to the RHODE ISLAND MEDICAL JOURNAL. He urged all delegates to inform their constituent associations of the public service features of the celebration.

Action: A motion was made to approve the report made by Doctor Porter. The motion was seconded and passed.

Report of Committee on Annual Meeting

Doctor Jesse P. Eddy III reported on the plans of the Committee on Scientific Work and Annual Meeting. He stated that several meetings had been held, that the committee had voted to stage the meeting at the Marvel Gymnasium of Brown University, and that arrangements for an enlarged technical exhibit area, as well as for a scientific exhibit display, had been developed, that Doctor Sabin had accepted the invitation to be the Chapin orator, and that the committee hoped to complete its program of scientific lectures within the next month.

Action: A motion was made, seconded and passed that the report of the Scientific Work Committee be approved.

New England Postgraduate Assembly

Doctor Adelson noted that the New England Postgraduate Assembly would be held at Boston on November 7, 8 and 9, and for the first time under the auspices of the Council of the New England State Medical Societies. He urged attendance at the Assembly by Rhode Island physicians.

Cancer Committee

The president noted that the report of the Cancer Committee was included in the handbook.

Action: A motion was made, seconded and passed that the report of the Cancer Committee be received and placed on file.

Diabetes Committee

The president noted that the report of the Diabetes Committee was included in the handbook.

Action: A motion was made, seconded and passed that the report of the Diabetes Committee be received and placed on file.

Medical Economics Committee

Doctor Stanley D. Simon, chairman of the Medical Economics Committee, reviewed his report as presented in the handbook. Various items in the report evoked general discussion.

Action: A motion was made that the resolution relative to a Fee Review Committee be adopted. The motion was seconded and adopted without dissenting vote.

Action: A motion was made, seconded and passed that the report of the Committee on Medical Economics as a whole be received, approved and placed on file.

Mental Health Committee

The president noted that the report of the Mental Health Committee was included in the handbook. Doctor Harold Williams, chairman of the committee, stated that he had no comment to make on the report.

Action: A motion was made, seconded and passed that the report of the Mental Health Committee be received and that the resolution therein be adopted.

Physicians Service

Doctor Earl J. Mara, vice president of Physicians Service, reported briefly on the report of the June 19 meeting of the board of directors, as included in the handbook, and on a recent board meeting.

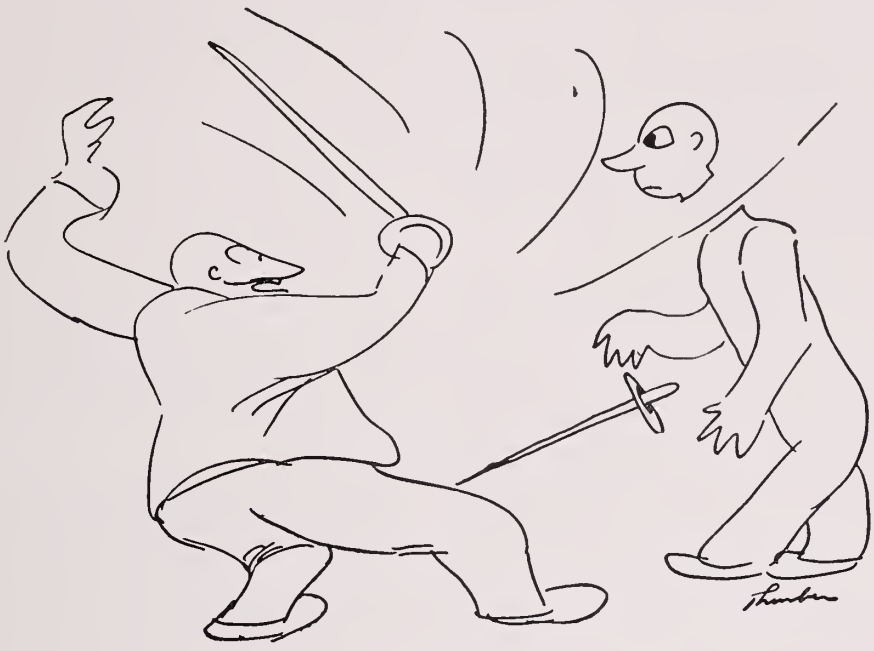
Action: A motion was made, seconded and passed that the minutes of the June 19, 1961 meeting of the board of directors of Physicians Service, as submitted to the House, be received.

* * *

No action was taken on a proposal that a representative of the Physicians Service administrative staff, preferably the executive director or his designate, be present at meetings of the House of Delegates to report on the program. Members pointed out that several members of the board of directors are members of the House and available to report.

* * *

continued on page 656



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HOUSE OF DELEGATES

continued from page 654

Social Welfare Committee

The president noted that the report of the Committee on Social Welfare was included in the handbook.

Action: A motion was made, seconded and passed that the report of the Committee on Social Welfare, as presented, be received and placed on file.

Prevention of Athletic Injuries

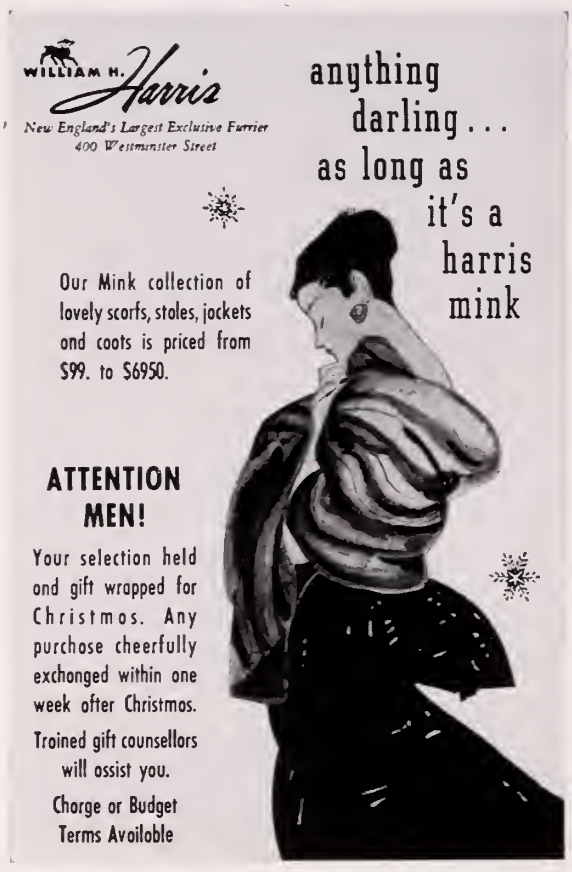
The report of the Committee on the Prevention and Treatment of Athletic Injuries was distributed to the members of the House.

Action: A motion was made, seconded and passed that the report of the Committee on the Prevention and Treatment of Athletic Injuries be received and placed on file.

Public Information Committee

Doctor Seebert J. Goldowsky addressed the House on the need for a public information committee to inform the public generally, and legislative groups in particular, of the views of the medical profession. The subject was discussed.

Action: A motion was made that the president of the Society be authorized to appoint a committee of ten (10) from the membership to form a Committee on Public Information whose function would be to convey information to the public generally and to federal, state and local legislative bodies regarding medical matters. The motion was seconded and adopted.



Adjournment

The meeting was adjourned at 10:00 P.M.

Respectfully submitted,
MICHAEL DIMAIO, M.D., *Secretary*

REPORT OF THE SECRETARY

At meetings of the Council held since the April meeting of the House of Delegates, the following were among actions taken:

1. The Sesquicentennial Committee was requested to arrange for admission to the Health Exposition to be held in April, 1962, by tickets distributed through physicians' offices, pharmacies, industry, etc., but no admission fee to be charged.
2. Approval was given the president's suggestion to the governor of the state that Doctors Gary Paparo and Herbert Fanger be considered as members of the Advisory Committee in charge of establishing regulations for clinical laboratories under the legislative act passed by the General Assembly this year.
3. Appreciation was voted for the Society to the Woman's Auxiliary for its contribution to the Benevolence Fund of the Society.
4. The president was authorized to submit the names of three members of the Society to the State Director of Health, one of whom would be named as a member of the Committee on Consultation to the Board of Nurse Registration and Nursing Education.
5. The list of medical specialties as adopted by the American Medical Association was approved as the pattern for the listing of specialties of members of the Rhode Island Medical Society in the roster to be issued by the Society.
6. Approval was given the topics proposed by the Trustees of the Fiske Fund for the 1961 Prize Essay Contest.
7. Approved of plans for a Family Day for physisians and their families to be sponsored by the auxiliary, and held on Sunday, October 15, at Coventry.
8. Reviewed and approved of the financial reports of the treasurer, and a proposed budget for the Society for 1962.
9. Authorized the president to send a covering letter to the membership regarding the Sesquicentennial assessment, and the Society plans for the Health Exposition, and further voted

that the Sesquicentennial assessment, already approved by the House of Delegates for a maximum of $20, be paid by November 1, 1961.

10. Approved of a follow-up program of children for a scarlet fever study to be undertaken by the division of maternal and child health of the State Department of Health, and also of a statewide detection program for PKU by the same division.
11. Approved of a planned survey by the State Department of Health to determine morbidity reporting of venereal diseases.
12. Voted to refer to the House of Delegates a State Health Department proposal for a glaucoma detection program.
13. Authorized the president to appoint three delegates to represent the Society at a meeting October 11 in Boston, sponsored by the Council on Medical Education and Hospitals of the A.M.A.
14. Named Doctor Earl J. Mara as the Society's representative to attend the A.M.A. Second National Congress on Prepaid Health Insurance to be held in Chicago.
15. Authorized the president to name a committee of three to consider a proposal for a tuberculosis control program.
16. Voted to refer to the House of Delegates a request that the Society nominate three candidates from whom one would be chosen chairman of the Rhode Island Advisory Committee to the Selective Service System.
17. Approved of the president's appointment of Dr. James McGrath of Wakefield as trustee-at-large of the Board of Trustees of the Medical Library for the year 1962.
18. Approved of the report of the chairman of the Board of Trustees of the Medical Library relative to repairs to the Society's property.

MICHAEL DIMAIO, M.D., *Secretary*

REPORT OF THE TREASURER

Appraisal of Investments

The latest appraisal of the market value of the invested funds of the Society supervised by the Trust Department of the Industrial National Bank, as of August 11, 1961, is submitted as part of this report.

The Trust Department of the bank makes no recommendations of changes in investments as they consider that they "all seem suitable for retention at this time."

Budget for 1962

In accordance with the bylaws, I submit a proposed budget for the year 1962 for the Society which has already been reviewed by the Council and approved by it. The budget reflects the operating costs of this and previous years, and no important changes have been made over that of the current year.

A.M.A. Dues to Increase

The American Medical Association has notified us that its House of Delegates has voted that the annual A.M.A. dues shall be increased to $35 in 1962, and to $45 in 1963.

J. MURRAY BEARDSLEY, M.D., *Treasurer*

CANCER COMMITTEE

The Cancer Committee of the Rhode Island Medical Society held an interim meeting in July in conjunction with the Committee on Professional Education of the American Cancer Society.

Two films were shown dealing with the diagnosis of rectal malignancy, and an active discussion of these films followed.

It was decided to meet with the president of the Rhode Island Academy of General Practice to determine whether or not our Cancer Workshops in the fall should be oriented in this direction.

Further details will be forthcoming following this meeting with Doctor Charles Farrell.

Respectfully submitted,
HENRY C. MCDUFF, JR., M.D., *Chairman*

DIABETES

The Committee on Diabetes has active plans for National Diabetes Detection Week, November 12-18, 1961.

On Sunday, November 12th, the 455th General Hospital, U.S.A.R. will hold a fair at their training center on Sandy Lane in Warwick (Doctor Peter Erinakes, chairman).

On Wednesday, November 15th, a fair will be held at St. Joseph's Hospital (Doctor Albert Tetreault, chairman).

It is hoped also that there will be a fair again this year in Newport.

Respectfully submitted,
WILLIAM L. LEET, M.D., *Chairman*

MEDICAL ECONOMICS

The Committee on Medical Economics reports on the following matters:

Group Health and Accident Insurance

An agreement has been reached with the Continental Casualty Company for them to assume the entire risk under the disability insurance program initiated by the Providence Medical Association and made available also to members of the Rhode

continued on next page

Island Medical Society outside the Providence district. Previously the Bankers Security Life handled the "extended coverage" phase of the program.

Group Blue Cross and Physicians Service

Renewal notices, as well as opportunity for new members of the Society to enroll, have been mailed this month for the group Blue Cross-Physicians Service program which is available to the Society members on a group basis, providing comprehensive plan rates for the Blue Cross $20 per diem plan, and the Physicians Service "A" Plan. A majority of the membership has availed itself of this program which is handled by the Executive Office of the Society as a service to the membership.

Medicare Fee Schedule

Although the Rhode Island Medical Society did not enter into a formal contract with the federal government for the Dependents Medical Care Program which has encountered its share of problems nationally, a fee schedule was imposed for services rendered in this State by Rhode Island physicians. Over a year ago the program was curtailed and most of the eligible recipients have been required to utilize the government medical installations at Newport and the Quonset Air Station. However, many continue to be attended by private physicians.

Announcement has been made within the month that no longer can the Medicare schedule of maximum allowances be sent to physicians. The same schedule of maximum allowances used in the past will continue in use.

The physician providing care for Medicare recipients should bill his usual or normal fee for like services provided to an individual with an annual income of $4,500 or less.

Relative Value Schedules

At least two years ago the Society eliminated all fee schedules such as the one previously developed for wards of government, and the one suggested as a guide to prevailing charges in the area.

A year ago representatives of the Society attended a regional meeting sponsored by the American Medical Association in Boston to discuss the development of relative value schedules. At that time the Society representatives found no satisfactory reasons for the development of that type of schedule in Rhode Island.

In April of this year the National Association of Blue Shield Plans, by action of its board of directors, voted the establishment of "a composite professional service index"— in effect a national relative value study—to enable Blue Shield to sell and service nationwide accounts. Although approved by the national body, the index must now get similar approval at the local level to become effective.

Your Committee has reviewed this problem and it has voted that it objects to the imposition of a relative value service index for the Physicians Service program in Rhode Island.

Physicians Service Fee Review Committee

At the April meeting of the House of Delegates it was voted that the Committee on Medical Economics of the Society consider feasible mechanisms for the establishment of a fee review committee, and that it report to the House of Delegates its recommendations.

Your Committee has given this matter much study, and it has unanimously adopted the following recommendation which it submits to the House:

WHEREAS, the House of Delegates has established as an elected standing committee of the Society the Committee on Medical Economics and has charged that committee with the duty of studying and investigating such phases of general economics as have a bearing on the practice of medicine, and

WHEREAS, the subject of fees for service rendered by physicians is the basic and paramount economic phase of the practice of medicine,

THEREFORE, the Committee on Medical Economics is firmly of the opinion that it is constituted adequately to be the permanent fee schedule committee of the Society to review all existing or proposed fee schedules with the aid of the membership, individually and through organized spe-



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cialty groups, and to make recommendations based on its findings to the House of Delegates of the Society.

Medical Care for the Older Age Person

Your Committee has on previous occasions reviewed at length the status of medical care for the older aged citizens of Rhode Island. We call attention at this time to the interesting report of Blue Cross-Physicians Service on their coverages for the over age 65 subscribers, as reported in the special report submitted at the public hearing called by the director of Business Regulation of the state a week ago.

We feel that the state administration of Rhode Island has been biased in its urging for the passage of the King bill in the present Congress to provide old age medical care benefits through the social security system, while currently the people of Rhode Island are paying their share of the federal tax to provide the funds for the operation of the Kerr-Mills bill passed by the Democratic Congress a year ago whereby needy old age persons may be provided hospital and medical care assistance.

We feel that the Society has reason to be sharply critical of the failure of the General Assembly and the governor to act in regard to this bill, and we feel that the State Division on Aging, whose administrator traveled to Washington to testify for the King bill now before the Congress, has been derelict in its task if it truly believes that there are older aged persons lacking medical attention in this state when there are available funds to alleviate any such situation.

Report of the Director of Business Regulation

On Sunday, September 17, the PROVIDENCE SUNDAY JOURNAL published parts of a report credited to Mr. Harold Arcaro, state director of business regulation, in apparent defense of his position and views regarding the rate charges for Blue Cross and Physicians Service subscribers.

Your Committee has not had available to it the complete report of Mr. Arcaro. On the basis of the newspaper account, however, we are of the opinion that the Society should take definite steps to review the report and to challenge, correct and refute any freely asserted generalizations not substantiated by factual evidence.

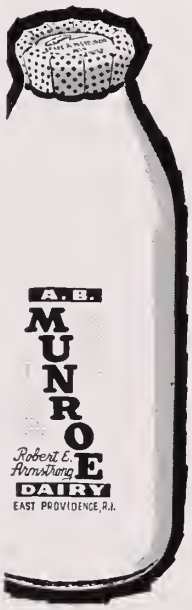
Investment Program for Society Members

Your Committee, after completing its poll of the membership regarding its proposed investment program to be sponsored by the Industrial National Bank and the Hospital Trust Company, worked with bank officials during the summer months on details of the plan. A special announcement has been prepared for distribution to the members of the

continued on next page

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Society to answer questions relative to the operation of the program.

Respectfully submitted,

STANLEY D. SIMON, M.D., *Chairman*

MENTAL HEALTH

The Committee on Mental Health has been active in improving the return on your many tax dollars spent for the care and treatment of patients at the State Hospital for Mental Diseases. In 1960, 1,647 patients were admitted; 3,236 patients were in residence. During 1959-60 the Committee was accorded the opportunity to advise and assist the Department of Social Welfare in instituting fresh faces and perspectives with the Medical Administration of the State Hospital for Mental Diseases.

Came 1961 and a change of administration of the Department of Social Welfare. The vigorous new Medical Administration was subjected to harassment in its primary mission of the care and treatment of patients. The usual type of human relationship in the domain of politics consists of favoring a diligent party worker with a governmental job, commonly with a disparity in training, experience and merit in the job requirements. As physicians, you are keenly aware that this patronage type of relationship results in the primary mission of the care and treatment of patients becoming incidental —with the patient becoming a victim. Traditionally, and exceptionally, the State Hospital has been off limits for political patronage. This tradition came to be disregarded.

With this happening, the Committee on Mental Health arranged a meeting with Mr. Albert Russo, the director of the Department of Social Welfare. This was held on Tuesday, June 20, 1961. In substance, a stand was taken on the issue of patronage. The combined training and experience of the Committee was made available. The principle was elucidated that the State Department should aid and abet the functioning of the Medical Administration at the Hospital rather than dictate. The employment of physicians devoid of training and specialization in Psychiatry was stated to be unwise. There was discussion with a view to attracting more capable physicians to the State Hospital. The participation of practicing physicians in the specialty of psychiatry in an active consultation capacity was endorsed. The Department of Social Welfare sought another meeting.

Meanwhile, the Rhode Island Association for Mental Health, Inc. became incensed with respect to the patronage issue. Since co-operation of the Department of Social Welfare was assured, the Rhode Island Association for Mental Health, Inc. graciously withheld separate action to avoid confusion and disparity of action. A public letter of commendation to your Committee was issued by this Association.

A second meeting was held on July 25, 1961 at the State Hospital. The superintendent of the State Hospital, Doctor Sidney Goldstein, was invited. The president of the Rhode Island district branch of the American Psychiatric Association, Doctor Barry Mongillo, joined forces with your Committee. Doctor John J. Pelosi, the new director of state institutions, was present. Specific proposals were made to aid the State Hospital in regarding the good professional reputation it had possessed prior to World War II. A subcommittee, headed by Doctor David Fish, was formed to give continuity to the effort which had been set in motion. The principle was reiterated that specialization is a prerequisite to the employment of physicians above the level of residency, even though vacancies had in fact existed for some time.

In an informative sense, the Committee wishes to report of a new concept which has been further extended by the present administration within the scope of the state's traditionally assumed financial responsibility for the care and treatment of patients with mental disorders. Relatives and patients are being required to pay within their means for the care of patients at the State Hospital. The Outpatient Service, known as the Mental Hygiene Services and located at Butler Health Center, will make charges for diagnostic and treatment work. Your Committee is of the opinion some recovery of tax funds expended is desirable, that patients on the whole are better motivated when they pay for services rendered, but has certain reservations that the state is intruding into the practice of medicine.

The Committee desires to call to the attention of the House of Delegates the final report of the Joint Commission of Mental Illness and Health. This report of the Joint Commission is the resultant of the Mental Health Study Act of the Congress of these United States. It should be studied. There is the matter, for example, that many people, including physicians, find it hard to recognize psychological illness as illness.

Your Committee would like to have the House of Delegates pass a Resolution and have said Resolution sent to Mr. Albert Russo, director of the Department of Social Welfare. The statement is derived from the final report of the Joint Commission of Mental Illness and Health:

RESOLVED that the State Hospital must cease to be treated as a target for political exploitation.

RESOLVED that the professional care of the patient be distinguished from the administrative responsibility for his welfare and safe keeping.

Respectfully submitted,

HAROLD W. WILLIAMS, M.D., *Chairman*

PREVENTION AND TREATMENT OF ATHLETIC INJURIES

The Committee on the Prevention and Treatment of Athletic Injuries of the Rhode Island Medical Society in conjunction with the Rhode Island Secondary School Principal Association's Committee on Athletics held a one-day conference at Providence College on September 11, 1961.

The meeting started at 1:00 P.M. in Albertus Magnus Hall with registration. Joseph P. Delaney, chairman of the Principals' Committee on Athletics, opened the conference at 1:30 P.M. and was followed by Very Reverend Vincent C. Dore, O.P., president of Providence College, who extended the greetings of the College to the group. Doctor Samuel Adelson, president of the Rhode Island Medical Society, was unable to attend but was ably represented by Doctor Frank I. Matteo who extended the greetings of the Rhode Island Medical Society.

About 125 persons attended, the registrants including school nurses, school physicians, coaches, athletic directors, trainers and physical education teachers.

The scientific phase of the meeting was opened at 1:30 P.M. by Doctor A. A. Savastano, orthopedic surgeon, Department of Athletics and Student Health, University of Rhode Island, whose lecture dealt with *Keeping the All-Scholastic Candidate Active*. This was followed by a lecture by Doctor William J. Schwab, assistant director of Student Health Services, Providence College, who spoke on *The Importance of a Good Physical Examination.*

Doctor G. Edward Crane, athletic surgeon, Brown University, spoke on *The Recognition of Types of Injuries.*

After an intermission the following panels on special problems were represented: Dental Injuries by Vincent J. Oddo, Jr., D.D.S., member of the Medical Advisory Board, National Boxing Association; Eye Injuries by Doctor Alexander Calenda, junior assistant surgeon, Department of Ophthalmology, Rhode Island Hospital; Ear, Nose and Throat Injuries, Doctor Nathan A. Bolotow, F.A.C.S., attending surgeon, ENT, Miriam Hospital; Head Injuries, Doctor Julius Stoll, Jr., chief of Department of Neurosurgery, Rhode Island Hospital; Pre-game Diets, Doctor S. J. P. Turco, medical director, University of Rhode Island; The First Aid Room, Doctor Joseph E. Donahue, assistant director of Student Health Services, Providence College.

During the latter part of the afternoon a good demonstration was given on *Protective Equipment for the Athlete* by Ken MacAfee, former outstanding member of the New York Football Giants and Washington Redskins. Mr. L. S. Nelson, former

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football coach at Norwich University, assisted in the demonstration and lecture.

After a dinner in the Raymond Dining Hall of Providence College, the evening phase of the program was started with a demonstration on proper bandaging and taping in order to prevent athletic injuries. This was presented by Richard Cole, associate professor of Physical Education and athletic therapist at the University of Rhode Island, and Pete Louthis, head athletic trainer at Providence College.

The last lecture of the evening was given by Mr. Stephen E. Witkowski, head trainer, Wesleyan University, Middletown, Connecticut. Mr. Witkowski spoke on *Proper Preparation for Strenuous Exercise*. Mr. Witkowski was the featured speaker of the evening as he was the head trainer of the United States Olympic Teams in both 1956 in Melbourne, Australia and in 1960 in Rome, Italy. He is the only man to hold the position twice. Mr. Witkowski is also well known as a bowler, having won the National Duckpin Championship in 1951.

The concluding portion of the meeting consisted of a question period at which time many interesting questions were asked of the speakers of the afternoon and evening sessions. It is felt that the meeting was exceptionally well attended, and many of those who attended expressed themselves as being very well pleased with the meeting and hoped that there would be more such meetings in the future.

Respectfully submitted,
A. A. Savastano, *Chairman*
Committee on the Prevention and
Treatment of Athletic Injuries

SOCIAL WELFARE

During the period March 9 through April 24 the Medical Bureau sent a questionnaire to physicians who accepted calls for a physician from persons without a family doctor who indicated an emergency illness necessitating a physician's services, and who were recipients of public assistance under the State Welfare program. Sixteen physicians reported a total of 116 such calls. The physicians reported that 61 patients could have gone to a doctor's office, or a hospital accident room that day or the next day, instead of calling the Bureau for a physician, whereas 53 could not have followed such a procedure. The physicians reported in answer to the inquiry whether they considered the call one for a real emergency, that 49 were real emergencies and 66 were not.

Presently the Medical Bureau, the Committee and the Medical Division of the Social Welfare Department are working together in an effort to improve and instruct welfare recipients in their responsibilities towards obtaining medical services.

The Department of Economic Research of the A.M.A. is collecting material for a study of "Means Tests" used by various government agencies—federal, state, and local—to ascertain the eligibility of individuals for public money or services financed with public funds. The Committee is working with the medical division of the Rhode Island Social Welfare Department on this project.

Respectfully submitted,
Peter L. Mathieu, M.D., *Chairman*



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BOOK REVIEWS

RYPINS' MEDICAL LICENSURE EXAMINATION: TOPICAL SUMMARIES AND QUESTIONS. Edited by Walter L. Bierring, M.D. 9th ed. J. B. Lippincott Co., Phil., 1960. $11.00

This newly revised and most up-to-date book of Rypins' original work is an aptly presented, concise collection of medical data in the basic sciences and in clinical medicine. Each subject has its authoritative summary and comprehensive questions covering the essential facts contained in these summaries. The initial article on *Medical Qualifying Examinations* has been revised in accord with the results of many examinations conducted recently by the Federation of State Medical Boards of the United States.

This very readable book should serve not only as an excellent tutor to medical students preparing for licensing examinations but also as a refresher course to the busy practitioner and to all doctors who have been out of touch with the latest developments in medical research.

While preparing the review of this widely known book, the death of its famous editor, Doctor Walter L. Bierring, has been reported. This Grand Old Man of the American medical profession has left us with a most valuable book, a lasting monument to its most distinguished author.

EARL F. KELLY, M.D.

HANDBOOK OF SURGERY. Edited by John L. Wilson, M.D., and Joseph J. McDonald, M.D. Lange Medical Publications, Los Altos, Calif., 1960. $4.00

All interns and residents should have ready access to one of the several pocket reference handbooks available. The HANDBOOK OF SURGERY, edited by Wilson and McDonald, is an acceptable example of this class of book.

The usual subdivisions of the surgical field are presented, as are interesting sections on trauma, burn therapy, fluids and electrolytes, and a section on the standard, and some of the newer, drugs. The panel of authors is drawn from the San Francisco and Palo Alto areas. It is unnecessary to say that only superficial information, much of it in tabulated form, is contained in this book; but to be serviceable as a handbook, it should contain no more. It is to be recommended.

JOSEPH E. CARUOLO, M.D.

SOURCE BOOK OF MEDICAL HISTORY. Compiled with Notes by Logan Clendening, M.D. (Unabridged and unaltered republication of the work first published by Hoeber, N.Y., 1942) Dover Publications, Inc., N.Y., 1960. $2.75

EXPERIMENTS AND OBSERVATIONS ON THE GASTRIC JUICE AND THE PHYSIOLOGY OF DIGESTION by William Beaumont. Facsimile of the original edition of 1833 together with a biographical essay A PIONEER AMERICAN PHYSIOLOGIST by Sir William Osler. Dover Publications, Inc., N.Y., 1960. $1.50

CLASSICS OF MEDICINE AND SURGERY. Collected by C. N. B. Camac. (Formerly titled: EPOCH-MAKING CONTRIBUTIONS TO MEDICINE, SURGERY AND THE ALLIED SCIENCES. Published originally by W. B. Saunders Co., Phil., 1909) Unabridged and unaltered republication. Dover Publications, Inc., N.Y., 1960. $2.25

(1) This paperback reprint of a standard collection by the late Doctor Clendening of excerpts from the writings of the "greats" belies its modest price. It is well printed in legible type on paper of better quality than the usual paper-covered re-issue. One cannot review the contents as such for they represent the classic historical contributions from Hippocrates through Roentgen. For one who wishes to consult the founders of medicine in their own language, this volume provides a well-selected and handy reference.

(2) This, like Doctor Clendening's volume is a re-issue of the great classic of personal observations of the physiology of gastric digestion. The original has become quite expensive and this reprint, of excellent format, can well satisfy any but the bibliomaniac.

(3) This paperbacked volume, in the same format as the above, affords anyone the opportunity to possess a well-culled set of classic contributions at a reasonable price.

IRVING A. BECK, M.D.

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BRIEFS

FROM THE PHYSICIANS SERVICE PLAN OF THE RHODE ISLAND MEDICAL SOCIETY

November, 1961

THE AIM OF THE MEDICAL ECONOMICS COUNCIL . . .

Hospital utilization, its use and misuse, is a major challenge to the free practice of medicine.

To meet this challenge, the Hospital Association of Rhode Island, the Rhode Island Medical Society, Blue Cross and Physicians Service joined efforts in a determination to provide health services at the lowest possible cost, consistent with good medical care. As a result of this four party determination, the Medical Economics Council of Rhode Island was formed.

> Last August, the Council began a formal study of hospital utilization by having a medical record examiner screen hospital discharges daily at the Blue Cross office.
>
> Cases that appear to contain inconsistencies are reviewed and forwarded (thru hospital administrators) to the medical staff utilization committees (composed of physicians) that have been set up in the voluntary hospitals. They, in turn, study each case and send their findings to the Medical Economics Council.
>
> These findings will be collectively studied by the Medical Economics Council. The council will then make recommendations to assist in "providing health services at the lowest possible cost, consistent with good medical care."

The purpose of this cooperative effort by hospitals, doctors, and the voluntary health plans can be found in the inaugural address of Dr. Leonard W. Larson, President of the American Medical Association.

> "I regard self-discipline as a vital responsibility which we as physicians must exercise vigorously and openly if we are to preserve our free practice of medicine.
>
> "I don't think it will ever be repetitious for the medical profession to restate its creed on this matter. WE SHALL DISCIPLINE OURSELVES."

DECEMBER, 1961

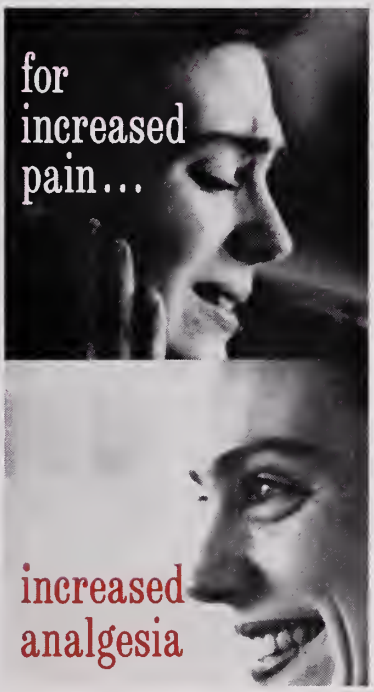
RHODE ISLAND

Medical Journal

Volume XLIV, No. 12

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References: (1) Pulaski, E. J., & Taylor, L. W.: *California Med.* 92:35, 1960. (2) Finland, M.: DM: Disease-a-Month, Sept., 1960, p. 3. (3) Monsour, V.; Bernard, H. R., & Cole, W. R.: *Missouri Med.* 57:1006, 1960. (4) Welch, H., in Welch, H., & Finland, M.: Antibiotic Therapy for Staphylococcal Diseases, New York, Medical Encyclopedia, Inc., 1959, p. 14. (5) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960. (6) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* 105:398, 1960. (7) Goodier, T. E. W., & Parry, W. R.: *Lancet* 1:356, 1959. (8) Lind, H. E.: *Am. J. Proctol.* 11:392, 1960.

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December, 1961

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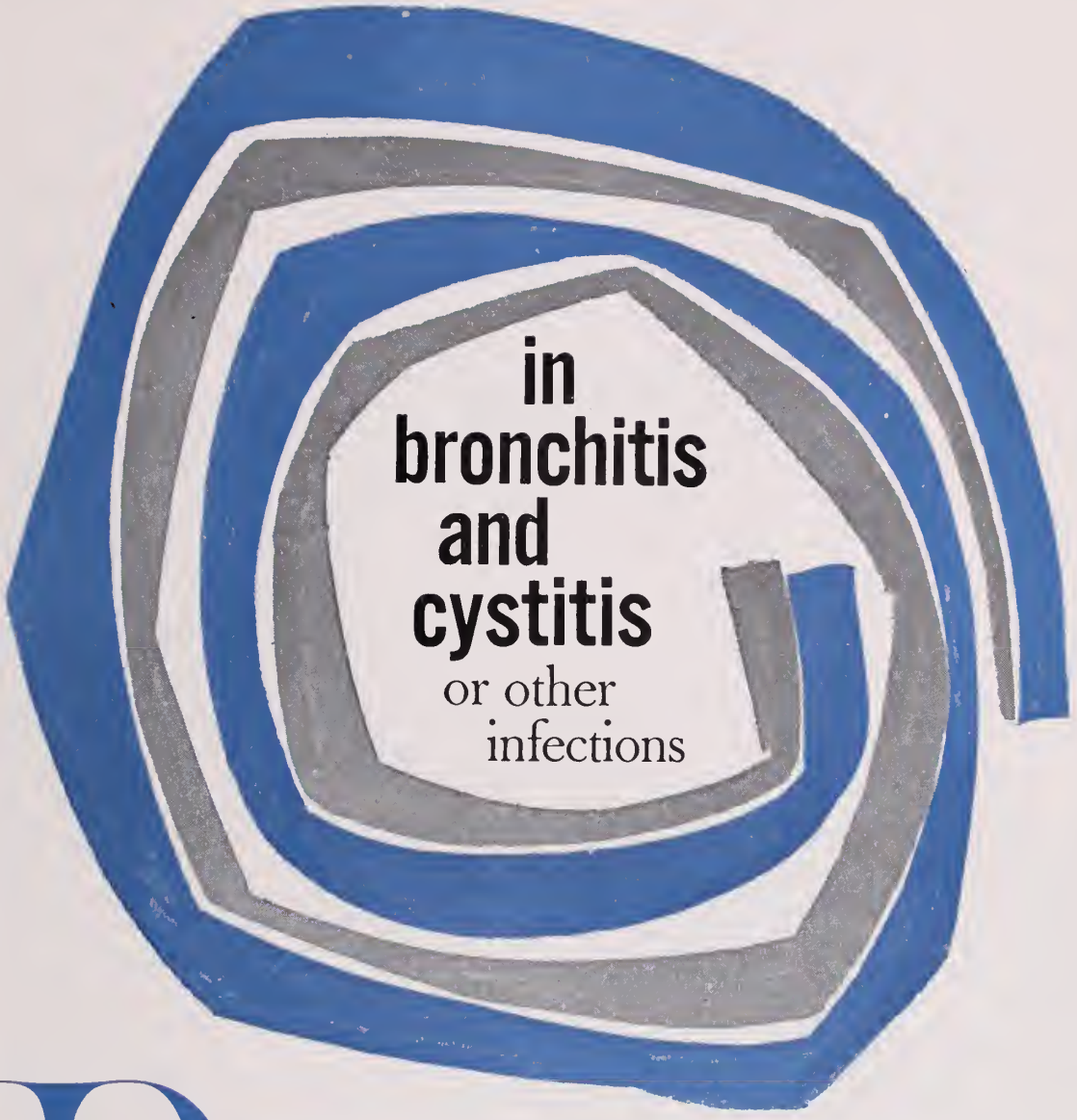
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CITIZENS HEALTH EDUCATION COMMITTEE

COMMUNITY LEADERS TO AID IN SESQUICENTENNIAL CELEBRATION OF THE RHODE ISLAND MEDICAL SOCIETY

OUTSTANDING COMMUNITY LEADERS have accepted the invitation to serve with Governor John A. Notte as a Citizens Health Education Committee to aid the Rhode Island Medical Society in its 150th year celebration in 1962, particularly in connection with the Exposition of Health Progress to be held at the Cranston Street Armory from April 6 to 15. The Committee held its organization meeting at a luncheon at the Sheraton-Biltmore on October 27, with the Society as host.

Speaking at the luncheon meeting of 40 civic, labor, health, education and business leaders, Doctor Samuel Adelson, Newport surgeon who is president of the Medical Society said, "The doctors of Rhode Island are obtaining some of the nation's most advanced educational exhibits which explain recent progress in health care and medical practice.



Doctor Arnold Porter, *left*, and Doctor Samuel Adelson, right, standing in front of the painting of the founder of the Rhode Island Medical Society, Doctor Amos Throop, view Health Education Month proclamation issued by Governor Notte in connection with the Rhode Island Medical Society's Exposition of Health Progress to be held in April, 1962.

The doctors have done this in observance of the 150th anniversary of the founding of the Rhode Island Medical Society."

The event is called the *Rhode Island Exposition of Health Progress* and will be held April 6 through April 15. Doctor Adelson indicated that more than 75 exhibits will demonstrate in easy-to-understand terms the latest information available on weight control, nutrition, fitness, children's health, smoking, and many other important subjects.

Governor John A. Notte, Jr., also speaking at the luncheon, announced that he had proclaimed April, 1962 as *Health Education Month* and that he had formed a *Citizens Health Education Committee* to assist the doctors in spreading the latest health care information to all corners of the state.

According to Governor Notte, "All eighth grade children in the state will be invited to the Armory for guided tours during school hours in order to benefit from the important information that will be gathered there. We hope that all citizens will also benefit from this unusual free exposition."

In a brief ceremony, Governor Notte presented Doctor Adelson with a scroll proclaiming *Health Education Month.*

Speaking on behalf of the Medical Society's Sesquicentennial Committee which is handling arrangements for the Exposition of Health Progress, Doctor Thomas Perry, Providence surgeon, said, "Rhode Island's Exposition of Health Progress is similar to events which have been conducted in Kansas City, Columbus, Los Angeles, Miami, New York and several other cities.

"The purpose of these events is to expose the people to the most advanced, reliable information with which they can guard their health. Information is presented that is of pertinent interest to all types of people such as children, young parents, and those facing the problems of advancing age. Exhibits will be manned by doctors who will further explain points that are presented and answer questions. These expositions have been so enthusiastically received that many of the cities are planning to repeat them in the near future."

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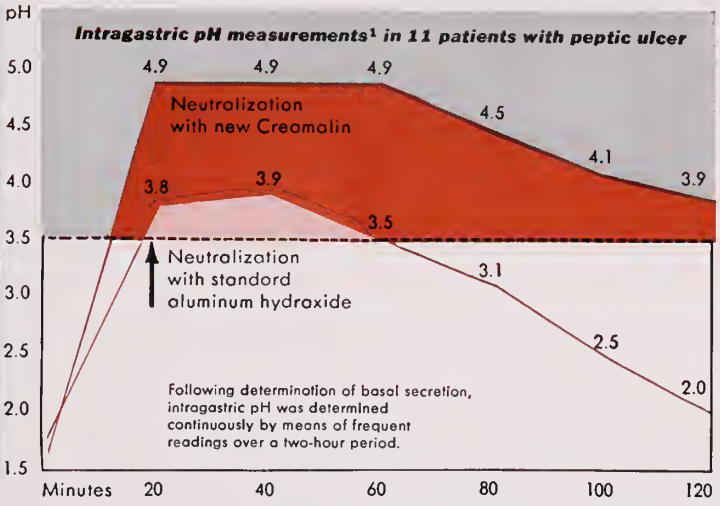
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References: **1.** Schwartz, I. R.: *Current Therap. Res.* 3:29, Feb., 1961. **2.** Beekman, S. M.: *J. Am. Pharm. A.* (Scient. Ed.) 49:191, April, 1960. **3.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:381, July, 1959. **4.** Data in the files of the Department of Medical Research, Winthrop Laboratories. **5.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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THE WASHINGTON SCENE

A Summary Report Prepared by the Washington Office of the American Medical Association

Radioactive Fallout

THE PUBLIC HEALTH SERVICE said that radioactive fallout levels resulting in the United States up until early November from the new series of Soviet nuclear explosions "do not warrant undue public concern" nor initiation of any special public health action.

The federal agency said that the prevailing levels were not high enough for the public to be concerned about the safety of milk and other foodstuffs.

But PHS added that "continuous, intensive surveillance" by federal, state and local governments was justified.

In a special statement issued after a two-day conference of government and private radiation experts, the PHS pointed out that "very little is known about the effects on animals or humans of very low but prolonged exposures" from either natural background radiation or fallout from nuclear tests.

"The consensus of scientific opinion is that the most prudent course is to assume there is no level of radiation exposure below which one can be absolutely certain that harmful effects may not occur to at least a few individuals when sufficiently large numbers of people are involved," the PHS said. "This is known as the 'non-threshold' concept."

This concept is the basis for U.S. policies and programs for assessment of radiation hazards and for control measures designed to limit exposures of the population, the PHS said and added:

"When this non-threshold concept is applied to present radiation exposure levels being experienced in the U.S. from all sources, including fallout, the following assessment can be made:

"The extra radiation caused by the Soviet tests will add to the risk of genetic effects in succeeding generations, and possibly to the risk of health damage to some people in the United States. It is not possible to determine how extensive these ill effects will be — nor how many people will be affected. At present radiation levels, and even at somewhat higher levels, the additional risk is slight and very few people will be affected. Nevertheless, if fallout increased substantially, or remained high for a long time, it would become far more important as a potential health hazard in this country and throughout the world.

"It is the obligation of our federal and state governments to undertake all possible measures to assess accurately the public health significance of the present fallout situation, and to prepare for actions to safeguard the public health if these become necessary."

Federal officials said radioactive fallout on the United States will increase next February, March, April and May when the late winter and spring rains wash to earth the remainder of the fallout from the Soviet nuclear tests but it isn't expected to reach a danger level. President Kennedy said any U.S. nuclear tests in the atmosphere would be designed to hold radioactive fallout to an absolute minimum.

The PHS said that the nation's health authorities are giving careful consideration to the possible situations that might require various corrective actions.

"It is evident that an important element of health protection is continuous surveillance and analysis," the PHS said.

"To achieve this, a number of federal-state systems for public health surveillance, detailed investigation, and radiation control measure have been developed . . . In co-operation with state and local health departments, the PHS operates a nationwide early warning atmospheric radiation surveillance network currently comprised of 58 stations, and a 60-station milk radiation monitoring system. In addition, the PHS has well-established networks for general air and water pollution monitoring with a total of 343 stations. All of these include radiation monitoring among their capabilities and all are being expanded. For example, daily samples of drinking water are being collected in twelve major cities and analyzed for specific radioactive content on a weekly basis, and plans are ready for more extensive monitoring if necessary. Rounding out the PHS resources is a system of highly specialized regional radiological health laboratories.

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THESE 29,000 PEOPLE IN RHODE ISLAND NEED MEDICAL HELP

Heart disease, cancer, mental illness — everyone knows the nation's three major medical problems. Do you know that alcoholism ranks fourth? In the state of Rhode Island there are at least 29,000 alcoholics. These people need medical help. No one is in a better position to initiate and supervise a program of rehabilitation than the physician who enjoys the confidence of the patient or the patient's family.

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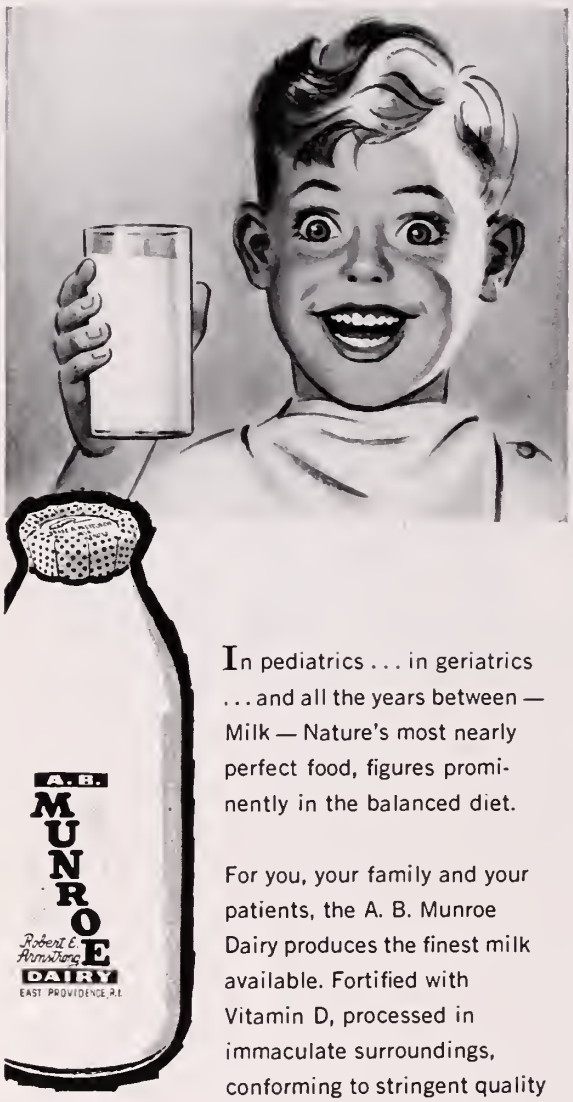
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THE WASHINGTON SCENE

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"The Food and Drug Administration has expanded its program of monitoring the levels of radioactive contamination in foods. Working through eighteen district offices and thirty-nine resident inspection stations, its inspectors are sampling foods from all parts of the nation; particularly those areas where the Public Health Service's air monitoring network has indicated the highest concentration of atmospheric contamination. Additionally, FDA collects samples from selected lots of food being imported into the United States.

"These samples are being analyzed for total beta activity and selected samples are further tested to determine what specific radioisotopes are present and in what amount.

"In addition there are the extensive special-purpose radiation surveillance and research facilities of the Atomic Energy Commission and the Departments of Defense, Commerce, and Agriculture.

"All federal programs and resources work in close concert, and follow the same radiation protection standards, through the co-ordinating influence of the Federal Radiation Council . . .

Supplementing these federal programs and resources is a steadily increasing radiological health capability among state and large city governments. Their programs are usually centered in the departments of public health, with certain special responsibilities often located in other agencies such as state or city departments of public safety. At every level of government, resources and programs are being expanded to cope with the potentially hazardous situation the nation now faces.

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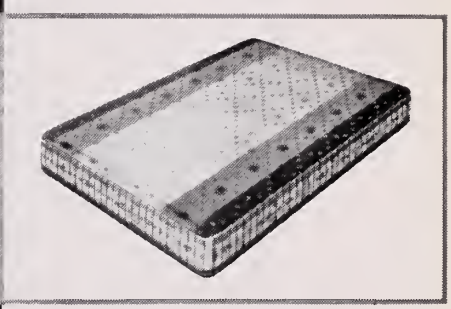
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CONGENITAL ATRESIAS OF THE GASTROINTESTINAL TRACT

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CONSIDERABLE PROGRESS has been made within recent decades in the treatment of congenital atresias of the gastrointestinal tract. We are recording our first successful experience with a case of duodenal atresia in a female infant, and shall at the same time highlight the salient features of this lesion.

Case Report

A female infant (MH 176118), born of a hydramnios mother apparently at full term, failed to pass meconium during the first twelve hours of life. A questionable diaphragm was felt on rectal examination, but a barium enema revealed a normal large bowel. On the second day of life, the infant was unable to retain any of her feedings, and her abdomen became distended. On the fourth day, a barium study of the upper digestive tract revealed a markedly distended stomach and duodenum with a constrictive band at the level of the pylorus creating an hourglass deformity. The leading point of the barium was at the distal part of the second portion of the duodenum. The infant by this time was dehydrated, and because of her precarious condition, after proper resuscitative measures emergency surgery with local anesthesia was decided upon. At operation, the earlier impression of duodenal atresia was confirmed. The atretic portion, a four-millimeter cord-like structure, was located between the second and third portions of the duodenum. A side-to-side bypass duodenojejunostomy was performed with considerable difficulty, but without incident. The gastrointestinal tract became functionally patent on the seventh postoperative day and the baby began to thrive. Follow-up at two-and-one-half years showed a normally active, healthy child who ate everything, slept well, was growing rapidly, and showed no evidence of retarded mentality, or other abnormality.

Discussion

The word "atresia" is derived from the Greek word *atretos*, meaning "nonperforated." Congenital atresia, including all forms of intrinsic narrowing up to total occlusion, is of rare occurrence. The incidence is estimated at one in ten to twenty thousand births. The first case was reported by Binninger[1] almost three centuries ago. Meckel[2] wrote on the subject in a booklet published in 1812.

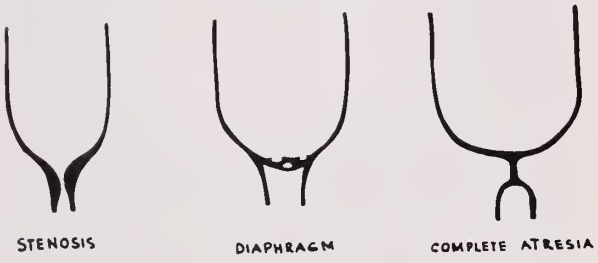


FIGURE 1

Weeks[3] in 1916 described a successfully treated case. By 1951, there were 1,498 cases reported in 1,353 articles.[4] In spite of the rare occurrence of this disease, awareness of the existence of the lesion is crucial. If undiagnosed, it is a rapidly progressive lethal deformity; while recognition of the problem with timely surgery has saved the lives of an increasing number of infants.

There are a number of theories on the pathogenesis of congenital atresia. According to the most widely held belief, proposed by Tandler[5] in 1902, the lumen of the primitive tube-like gut in the five-week embryo becomes obliterated by proliferating epithelial cells. Normally, patency is re-established towards the end of twelve weeks by coalescing vacuolization of these redundant cells. Failure of the recanalizing process results in varying degrees of narrowing.

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The high incidence of hydramnion in mothers of infants with atresia is an incompletely understood phenomenon. According to some observers, the fairly constant level of amniotic fluid is maintained by absorption of swallowed amniotic fluid through the intestinal tract of the fetus. A high intestinal obstruction excludes a large absorptive surface from functioning as stabilizer of the amniotic fluid level. Of further note is the unexplained high incidence of mongolism with duodenal atresia.



FIGURE 2

Anatomically, the lesion may consist of a complete diaphragm, or one with single or multiple perforations (Figure 1). The second form is stenosis or narrowing of varying length and width (Figure 2). In the third variety, there is complete obstruction of the bowel with or without a connecting cord between the proximal and distal limbs. The ileum is affected most commonly, followed by the duodenum, jejunum, and colon in descending order of frequency. Involvement of the ileocecal valve is extremely uncommon. Multiple lesions are seen in about six per cent of the cases.

As in any instance of intestinal obstruction, the stomach and the bowel proximal to the occlusion become distended by swallowed air and intestinal secretions. Distal to the obstruction the bowel is small and collapsed. Distention of the proximal bowel may lead to focal ischemia and perforation. The resulting peritonitis is almost invariably fatal.

In infants having complete atresia of the duodenum, symptoms become manifest on the very first day of life. Vomiting, especially after feedings, is the major symptom, and it becomes progressively more intense and frequent. Since the level of obstruction is almost always below the ampulla of Vater, the vomitus contains bile. Although the baby may have bowel movements, the amount of stool is usually small, and it is grayish-green in color. The degree of abdominal distention varies with the age of the child and the effectiveness of vomiting in emptying the stomach of its contents. If enough amniotic fluid is swallowed during the last few days of intra-uterine life, distention may be noticeable even at birth. Peristaltic waves may commonly be seen to progress from left to right over the upper abdomen. The baby becomes increasingly dehydrated and cachectic. This may account for some fever, but a temperature of 103° F or above usually indicates perforation with peritonitis.

The above picture is characteristic of complete duodenal atresia. Atresia at lower levels produces an essentially similar clinical picture with a slightly slower course, but perhaps more distention. Incomplete duodenal atresia on the other hand is usually manifested by bouts of vomiting and distention at intervals of months or even years. The diagnosis may not become apparent until the teen-age period although more commonly, when solid feedings are added to the diet, thus converting a partial into a total obstruction.

In the presence of a suggestive clinical picture, a flat film of the abdomen usually confirms the diagnosis. There is gaseous distention proximal to the obstruction, with narrowing at the pyloric ring creating an hourglass configuration. At times, however, barium studies are essential, though they are not without certain dangers. Aspiration of the ingested barium and plugging of an incomplete obstruction are dreaded complications. In order to minimize these risks, the use of a thin barium solution is advised.

The Farber[6] Test is a useful laboratory aid. In 1868, Jacoby,[7] a New York pediatrician, first noted the significance of epithelial cells in the meconium. Farber devised a staining method for the epithelial cells and popularized the test. The test is based on the principle that epithelial cells are swallowed from the amniotic fluid and normally pass with the meconium through the patent digestive tract. Conversely, in the presence of intestinal obstruction no such cells are to be found in the meconium. The test is performed by staining the meconium on a glass slide with gentian violet and then decolorizing with alcohol. Only the epithelial cells retain the dye and thus become prominent under the microscope.

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MALROTATION OF THE DUODENUM AND INTERMITTENT EPIGASTRIC MASS*

JOHN R. STUART, M.D.; WALDO O. HOEY, M.D., AND LLOYD LAGERQUIST, M.D.

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IN COMMON MEDICAL USAGE the term malrotation is usually associated with a gross embryological error causing intermittent or complete intestinal obstruction during infancy or childhood. The twenty-third edition of Dorland's MEDICAL DICTIONARY defines malrotation as "abnormal or pathological rotation as of the spinal column."[3] In actuality malrotation is a very general term and includes nonrotation, incomplete rotation, and reversed rotation. Associated anomalies of fixation may result in common mesentery, mobile cecum, persisting mesenteries of the ascending and descending colons, anomalies of the omentum, paraduodenal hernia, and other types of internal hernias.[2,4,6,7,10] Anomalies may also be divided into those occurring in the pre- and those in the post-arterial segment of the midgut.[4] Endless anatomic varieties are possible.[11] The presenting signs and symptoms of malrotation need not be those of intestinal obstruction, and patients may reach adulthood before they are first manifest. A recent case treated by the authors presented an unusual variation of midgut rotation and an unusual physical finding.

Case No. 205603. A forty-one-year-old white male admitted to the Roger Williams General Hospital with a chief complaint of intermittent epigastric pain radiating to the mid-dorsal back of four weeks duration. The pain was described as a severe discomfort and would usually occur two to three hours postprandially. Partial relief could be obtained by "doubling up." Excessive belching and some nausea had also been present during this period but were not related to the pain. There was no history of emesis, heartburn, indigestion, abdominal distension, fever, or diarrhea. Physical examination revealed a husky white male with a blood pressure of 130/80. Initially a questionable epigastric mass was palpated. Repeated examinations confirmed the presence of a smooth, tender, pulsatile epigastric mass measuring approximately three by five cms. which did not move with respirations. This mass was not constantly present and at times unrelated to food, position or activity was completely absent. There was a fair correlation between the presence of the mass and the presence of pain. There was no bruit and no other positive abdominal findings. The right femoral, popliteal and dorsalis pedis pulses were diminished (3 plus out of 4). Studies included a CBC, urinalysis and a serum amylase which were all within normal limits. The stool was guaiac negative. An EKG was within normal limits.

Course in Hospital. During the first hospital week the patient was placed on an ulcer regimen while various other studies were performed. A chest film and cholecystogram were within normal limits. An upper gastrointestinal series was also within normal limits and revealed no evidence of hiatus hernia, gastritis, or peptic ulceration. A small bowel series revealed that the duodenum passed downward to the right, made an anterior loop upon itself, and continued downward on the right (Figures 1 and 2). There was no dilatation or spasm of the

continued on next page



FIGURE 1

*From the Department of Surgery, Roger Williams General Hospital, Providence, Rhode Island.

duodenum and there was no evidence of a mass in this area. A barium enema was normal. The patient continued to experience pain without change, and an exploratory laparotomy was recommended. Preoperative diagnoses ranged from a dissecting aortic aneurysm, to carcinoma of the pancreas, to an anomaly of the small bowel. Laparotomy revealed the aorta, stomach, and the duodenal bulb to be normal. The gallbladder was thin walled and emptied readily. No stones were palpable in the external biliary ducts. The pancreas was normal in size and consistency. There were congenital adhesions between the gallbladder and the duodenum which were not significant. All portions of the colon were in their usual locations and fixation was normal. The gastrocolic ligament and the omentum revealed no defects. The duodenojejunal junction was on the right and posterior to the proximal transverse colon. Dissection proximal to this junction revealed that the distal second, third, and fourth parts of the duodenum formed an anterior retroperitoneal loop fixed in position by an abundance of fibrous tissue. The duodenum was not dilated but two kinks were present in the loop. The upper medial root of the small bowel was thickened and was mobile. The mobility was limited by the superior mesenteric vessels; however, it was possible for this portion of the small bowel mesentery to be either in the right paravertebral gutter or in the midline and over the aorta. In the former position it was inconspicuous to the palpating hand; in the latter position it presented as a smooth mass with transmitted pulsations. The procedures which were carried out consisted of lysing the retroperitoneal fibrous tissue, freeing the duodenum and straightening out the kinks, and an incidental appendectomy. No attempt was made to restore the usual location of the duodenojejunal junction or to anchor the upper small bowel root. The postoperative course was satisfactory and uncomplicated. The patient was enjoying a regular diet in five days. In a four-month follow-up period the patient has continued to do well and has experienced no further pain.

Discussion

In 1923 Dott called attention to abnormalities of midgut rotation and their embryological and surgical aspects.[4] This paper is widely quoted and lucidly describes the process of rotation and some of the anomalies which may occur. The majority of patients with malrotation who come to the surgeons' attention have incomplete rotation of the cecum with partial or complete obstruction of a normally located descending duodenum due to associated fibrous bands.[5,7] Ladd in 1933 described a procedure whereby these bands were lysed and the duodenum freed up.[9] This satisfactorily corrected the external duodenal stenosis and obviated the need for more formidable by-passing procedures.



FIGURE 2

In the case presented malrotation of the duodenum was present although the cecum had rotated normally, and fixation of the colon was normal. There was no definite evidence of duodenal obstruction present; however, there were two definite kinks present in the duodenal loop. One may speculate that the patient's symptoms were caused by traction on the fixed duodenum when the mesenteric root was in the midline. The simulation of a smooth, tender, pulsatile epigastric mass by a mobile and thickened mesenteric root is unique to our knowledge.

There are many anatomic types of malrotation, and each may have its variations; therefore there may be many variations in the clinical picture.[5,11] Although abnormalities of midgut rotation and fixation are responsible for obstructive symptoms in adults more frequently than realized, obstruction need not be present for the patient to have complaints.[2] The patient may complain of abdominal pain which occurs in an unusual pattern, and there may be other complaints of a vague and transient nature such as excessive gas, nausea, vomiting, or difficulty in expelling gas.[1,10] Many times physical signs may be absent and the clinical picture may be attributed to psychoneurosis.[10]

In one series of cases it was found characteristically that permanent radiological evidence of incomplete small bowel obstruction was present whether

the patient had complaints or not.[1] The case presented demonstrates that malrotated duodenal segments may be symptomatic despite a lack of obstructive signs and symptoms.

SUMMARY

1. The term malrotation is very general and includes many anatomic varieties and many clinical pictures.

2. A case of malrotation of the duodenum with normal rotation and fixation of the colon and a mobile portion of the small bowel mesentery simulating an epigastric mass is presented.

3. A modified Ladd procedure served as sufficient correction without creating the usual anatomic position of the duodenum.

4. Malrotated duodenal segments may be symptomatic despite the lack of clinical and X-ray evidence of obstruction.

References

[1]Bonis, A., and Taylor, H. K.: Recurrent Small Bowel Obstruction Due to Developmental Anomalies in Adults. Am. J. Gastroenterol. 24:562, 1955

[2]Brown, R. B., and Ross, D.: Congenital Abnormalities of Intestinal Rotation and Mesenteric Attachment. A Cause of Intestinal Obstruction in the Adult. Ann. Surg. 134:88, 1951

[3]Dorland, W. A. N.: The American Illustrated Medical Dictionary. Twenty Third Edition. 1598 pp. Philadelphia: Saunders, 1957. P. 793

[4]Dott, N. M.: Anomalies of Intestinal Rotation; Their Embryology and Surgical Aspects with a Report of Five Cases. Brit. J. Surg. 11:251, 1923

[5]Findlay, C. W., Jr., and Humphreys, G. H., II: Congenital Anomalies of Intestinal Rotation in the Adult. Internat. Abstr. Surg. 103:417, 1956

[6]Gardner, C. E.: Anomalies of Intestinal Rotation in Gastrointestinal Practice. Am. J. Gastroenterol. 24:448, 1955

[7]Gross, R. E.: The Surgery of Infancy and Childhood. 1000 pp. Philadelphia: Saunders, 1957. P. 192

[8]Kent, K. H., and Raszkowski, H. J.: The Importance of Preoperative Roentgen Diagnosis of Anomalies of Intestinal Rotation. Gastroenterology 36:633, 1959

[9]Ladd, W. E.: Congenital Obstruction of the Small Intestine. J.A.M.A. 101:1453, 1933

[10]Waugh, G. E.: Congenital Malformations of the Mesentery: A Clinical Entity. Brit. J. Surg. 15:438, 1927

[11]Williams, C. F.; Hughes, C. W., and Bowers, W. F.: Volvulus of the Cecum Associated with Malrotation of the Small Intestines in an Adult. Arch. Surg. 81:593, 1960

CONGENITAL ATRESIAS OF THE GASTROINTESTINAL TRACT

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The presence of a functionally significant intestinal atresia is indication for operative intervention. There are a few technical points worthy of mention. Gastroenterostomy, attractive as it may seem, should not be employed. Food passes into the blind duodenal stump, which becomes distended and dumps its contents back into the stomach, thus inducing vomiting. An exception to this rule is atresia of the first portion of the duodenum in the premature infant whose tiny intestine is too small for safe duodenojejunostomy. Another principle in the treatment of atresia is that an intestinal diaphragm should not be directly attacked surgically, as experience has shown that satisfactory correction by local excision of the diaphragm is unlikely. Lastly, electrolyte disturbances created by enterostomy losses are too severe for accurate and effective replacement therapy. Therefore, cutaneous enterostomies should be avoided. The cardinal principle in surgical therapy of atresia is employment of a side-to-side bypass anastomosis, utilizing the segments immediately proximal and distal to the lesion. The only exception to this rule is an iliac lesion, where side-to-side anastomosis carries a high mortality. In this case all exteriorization procedure is indicated. Thorough examination of the entire small bowel should be an integral part of the operation, since about six per cent of all atresias are multiple.

Since the employment of these principles and with the vast improvements in anesthesia and fluid therapy, now available, great strides have been made in the treatment of intestinal atresias. The over-all outlook, however, is still grim. In 140 cases operated upon at the Children's Medical Center in Boston, the mortality rate prior to 1940 was about 85 per cent although during the period between 1940 to 1952 it was reduced to less than 50 per cent. The average length of survival was only 5.8 days. The two leading causes of death were malnutrition with dehydration and peritonitis.

References

[1]Binninger, J. N.: Observationum et Curationum Medicinalium. Observ. 81, p. 222. Montbelgardi: Hyppianis, 1673 from Internat. Abst. Surg. 92:11, 1951

[2]Meckel, J. F.: Handbuch der Pathologischen Anatomie. Vol. 1. Leipzig: C. H. Reclam, 1812

[3]Ernst, N. P.: A Case of Congenital Atresia of the Duodenum Treated Successfully by Operation. Brit. Med. J. 1:644, 1916

[4]Evans, C. H.: Atresias of the Gastrointestinal Tract. Internat. Abst. Surg. 92:11, 1951

[5]Tandler, J.: Zur Entwicklungsgeschichte des Menschlichen Duodenum in Fruhen Embryonal Stadien. Morphol. Jahrb. 29:187, 1902

[6]Farber, S.: Congenital Atresia of the Alimentary Tract; the Diagnosis by Microscopic Examination of the Meconium. J.A.M.A. 100:1753, 1933

[7]Jacoby, A.: Defective Development of the Intestine. Am. Med. Month., N.Y., 16:30, 1861

[8]Gross, R. E.: The Surgery of Infancy and Childhood. Philadelphia: W. B. Saunders Co., 1952

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HYPOGAMMAGLOBULINEMIA ASSOCIATED WITH PERNICIOUS ANEMIA

Report of a Case and Review of the Literature

ALTON M. PAULL, M.D.

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AGAMMAGLOBULINEMIA, or hypogammaglobulinemia as it is now designated by many authors, was first described in 1952 by Bruton.[1] His patient, an eight-year-old boy, experienced eighteen bouts of sepsis. A deficiency of gammaglobulin was demonstrated, and recurrent infection controlled by repeated injections of gammaglobulin. In 1954, this clinical entity was first described in an adult female.[2] During the past seventeen years, approximately 150 cases have been reported in the medical literature.[3] In 1957, agammaglobulinemia associated with pernicious anemia was reported by Lewis and Brown.[4] Since then two additional reports of a similar association have been described.[5,6] The following is a report of a patient who has pernicious anemia and hypogammaglobulinemia.

Case History

R.V., R.I.H. 612958. This fifty-six-year-old white male was admitted to the Rhode Island Hospital in Providence, Rhode Island, on March 26, 1959, because of extreme weakness, pallor, and shortness of breath. For the past month, he had had shortness of breath which had become increasingly severe. In addition, he had noted substernal chest pain with radiation down both arms appearing with the slightest exertion. In spite of this, he continued to work until the time of admission. He also complained of paresthesias of both hands and soreness of the tongue. He gave a previous history of repeated urinary tract infections associated with dysuria. In August of 1956, he had been admitted to the Memorial Hospital in Pawtucket, Rhode Island, for dysuria. A segmental resection of the dome of the bladder was performed for a bladder diverticulum. Six days after surgery, he developed a right hemiparesis which cleared in a few days, leaving only a residual weakness of the right leg. At that time he was seen by a neurological consultant who felt that the patient had had a cerebral thrombosis.

Physical examination revealed a well-developed, fairly well-nourished white male presenting a marked pallor of the skin and mucous membranes. He was extremely dyspneic and appeared quite ill. Temperature 101° F, respirations 20, pulse 110, and blood pressure 160/80. There were hemorrhages in both retinae and some rare soft exudate was noted. The tongue was smooth and red. The heart was enlarged to percussion, and a grade III apical systolic murmur radiating to the left sternal border was noted. The liver and spleen were not palpable and there was no lymphadenopathy. There was 3 plus edema of both ankles and legs. The neurological examination revealed slight weakness of the right leg. All the deep reflexes were hyperactive. The prostate gland was moderately enlarged. X-ray examination of the chest revealed a normal heart contour and an irregular shadow 1 cm. in diameter in the left base just above the diaphragm which was thought to be an old fibrotic process. A gastrointestinal series showed the presence of a duodenal diverticulum in the third part of the duodenum. Examination of the blood revealed a hemoglobin of 3.5 gms. per 100ml, red blood cell count 0.96 million, and a microhematocrit of 10.5 per cent. The white cell count was 7750 with 65 per cent neutrophils. A blood smear disclosed the red blood cells to be macrocytic. Blood indices revealed the mean corpuscular volume to be 109, the mean corpuscular hemoglobin 36, and the mean corpuscular hemoglobin concentration 33 per cent. The fasting blood sugar was 105 mg.; blood urea nitrogen 13 mgs. per cent; total protein 7.2 gms./100cc with 4.4 gms. of albumin and 2.8 gms. of globulin. Paper lectrophoresis (Table 1) showed a marked decrease of gammaglobulin. The serological test for syphilis was negative. Gastric analysis with histamine stimulation showed an absolute achlorhydria. The blood was determined as type A, RH positive with no anti-A or anti-B agglutinins present on direct or indirect Coomb's testing. Cholesterol, cholesterol esters, cephalin flocculation, and thymol turbidity were normal. Study of the bone marrow aspiration revealed a megaloblastic hyperplasia. It was also noted that there was a sparsity of plasma cells. Several stools were negative for occult blood. The patient demonstrated a 1.5% uptake of cobalt

TABLE 1

	Normal Values	3/31/59	4/12/60	1/31/61
Total Proteins	6.0-8.0 gm / 100ml	7.2 gm / 100ml	6.3 gm / 100ml	5.7 gm / 100ml
Albumin	3.2-4.6 gm / 100ml	4.5 gm / 100ml	4.5 gm / 100ml	4.0 gm / 100ml
Alpha 1 Globulin	0.2-0.4 gm / 100ml	0.5 gm / 100ml	0.25 gm / 100ml	0.3 gm / 100ml
Alpha 2 Globulin	0.5-1.2 gm / 100ml	0.5 gm / 100ml	0.61 gm / 100ml	0.5 gm / 100ml
Beta Globulin	0.7-1.1 gm / 100ml	1.0 gm / 100ml	0.62 gm / 100ml	0.6 gm / 100ml
Gamma Globulin	0.7-1.4 gm / 100ml	0.2 gm / 100ml	0.33 gm / 100ml	0.3 gm / 100ml

tagged cyanocobalamine as measured by urinary excretion. The electrocardiogram showed a pattern of ischemia over the anterior wall of the myocardium.

On admission, the patient had a temperature of 101°F. He was immediately digitalized and placed on diuretics. This was followed by a good diuresis. Initially, it was requested that the patient be typed and cross-matched for possible transfusion if needed; however, the laboratory reported that he had an absence of alpha-beta-iso-hemo-agglutinins. This latter finding aroused my curiosity and further investigation of the plasma proteins revealed hypogammaglobulinemia. The diagnosis of pernicious anemia was established by the appearance of the blood smear, the presence of absolute achlorohydria, the Schilling test, and the bone marrow study. The administration of cyanocabalamine was started, and by the sixth hospital day his reticulocyte count subsided without antibiotics. The remainder of his hospital stay was uncomplicated. On discharge, his hemoglobin was 7.2 gms. per cent with a microhematocrit of 24. He was maintained on digitalis for a short period but this was later discontinued. Since discharge, the patient has been receiving intramuscular injections of cyanocobalamine at monthly intervals. The hemoglobin and hematocrit have remained in the realm of normal. A gastrointestinal series performed one year later showed the presence of a fairly large hiatus hernia of the sliding type. There was no evidence of gastric neoplasm.

In April, 1960, he was admitted to the Memorial Hospital for the repair of a right inguinal hernia. Because he had not experienced any previous infections it was decided not to give him gammaglobulin or prophylactic antibiotics, but to follow him carefully. His course was uncomplicated and he was discharged on the seventh post-operative day.

In January, 1961, he had a recurrence of the inguinal hernia on the right side and was again admitted to the Memorial Hospital. On admission, he had a mild upper respiratory infection and the operation was deferred for several days. One day post-operatively, the patient developed chilly feelings, sweating, and a temperature of 102.2°F. He had a few inspiratory rales at the left base. The white blood cell count was 17,400 with 72 per cent polymorphonuclear leukocytes with a hemoglobin of 13.5 gms. per cent. A chest X-ray revealed a pneumonitis of the left lower lobe, and a sputum culture was positive for pneumococci. The patient was treated with tetracyclin, and by the third post-operative day he was afebrile. He was discharged one week later. In April, 1961, the patient began to experience some dysuria. Examinations disclosed infection in the urinary tract and he was treated with appropriate antibiotics and later admitted to the Memorial Hospital where a transurethral prostatectomy was performed. He was in the hospital for ten days and made an uneventful recovery without gammaglobulin or prophylactic antibiotics.

Discussion

Agammaglobulinemia is a congenital or acquired syndrome characterized by the following: (1) increased susceptibility to bacterial infections with a history sometimes dating to childhood; (2) extremely low concentrations of gammaglobulin in the blood; (3) absence of antibody from the blood and tissues; and (4) failure of antibody production in response to antigenic stimulation. The normal range of serum gammaglobulin is about 600 to 1200 mg. per 100ml of serum.[7,8] Although the term agammaglobulinemia implies an absence of gammaglobulin in the plasma, the deficiency is usually not complete. The level of gammaglobulin is usually less than 30 mg. per 100ml of serum. It is now felt that a concentration of 150 to 200 mg. per 100ml is necessary to protect against bacterial infection;[9] therefore, the diagnosis of agammaglobulinemia should not be made when the serum gammaglobulin is greater than 150 mg. per 100ml of serum.

Agammaglobulinemic individuals may be divided into four groups:[7] (1) congenital agammaglobulinemia; (2) acquired or adult agammaglobulinemia; (3) secondary hypogammaglobulinemia; and (4) transient or physiologic hypogammaglobulinemia.

Congenital Agammaglobulinemia: This syndrome is observed in children and is characterized by recurrent bacterial infections beginning in infancy or early childhood.[8] It is felt that this form of agammaglobulinemia reflects an inborn error of metabolism transmitted genetically either as a sex-linked recessive or as a sex-limited dominant trait.

continued on next page

These patients frequently have poorly developed lymphoid tissues, frequent hematologic abnormalities, a high incidence of rheumatoid and collagen disease, and a high incidence of chronic pulmonary disease, particularly bronchiectasis.

Secondary Hypogammaglobulinemia[10] is frequently observed as a manifestation of many systemic diseases. Apparently, these patients develop hypogammaglobulinemia as a result of some diffuse disease of the recticuloendothelial system which interferes with the production of antibodies by normal plasma cells.

Transient Hypogammaglobulinemia[8] is temporary deficiency in circulating plasma gammaglobulin occurring in the first few months of life. Serum gammaglobulin levels are normal in the newborn infant but drop in the first month of life. After the third month, the levels again begin to rise and reach adult values at about two years of age.[11]

Adult or Acquired Agammaglobulinemia[8] occurs in later life, in both males and females. Patients suffering from this form of the disease, after a period of well being, begin to have repeated bacterial infections.

More recently another form of agammaglobulinemia has been described[12] which is also thought to be congenital. It occurs in females, and probably in males, and is usually less complete than the other type of congenital agammaglobulinemia. It is usually associated with enlarged lymphatic organs and often with hemolytic anemia.

The symptoms of agammaglobulinemia are directly related to the deficiency or absence of circulating gammaglobulin.[8] In congenital agammaglobulinemia, however, gammaglobulin is also absent in the tissue; thus the circulating deficit is part of a total body deficit.[8] It is now well established that the plasma cells and the lymphocytes are the sites of antibody and gammaglobulin formation.[13] The majority of investigators believe that the reticuloendothelial cell is the precursor of the plasma cell.[14] As a result of the failure to produce antibodies, agammaglobulinemic patients of both the acquired and congenital types show evidence of gross immunologic inadequacy. These patients lack antibodies to diphtheria toxin and streptococcal products, such as streptolysin O.[3] In addition, although most of them have had mumps as a clinical disease, they regularly lack mumps complement-fixing antibodies in their serum.[3] They also lack demonstrable amounts of herpes simplex neutralizing antibodies and poliomyelitis virus neutralizing antibodies.[3] It is of interest that, in spite of the fact that these patients are incapable of producing a satisfactory immune response to virus antigens, they have a surprising capacity to resist viral infection.[15,16] It has recently been suggested, however, that the agammaglobulinemic patients may be inordinately susceptible to the virus responsible for serum homologous jaundice.[3] Several agammaglobulinemic patients have been reported who developed homologous serum hepatitis, and in these patients the disease has been progressive and destructive. Whatever the basis may be, the relative lack of susceptibility to certain virus diseases and the high degree of susceptibility to certain bacterial infections are the striking clinical characteristics of the agammaglobulinemic patient.

Diagnosis

The tests used to establish the diagnosis of agammaglobulinemia have been separated into two groups: presumptive and definitive.[17] Presumptive tests aid in the diagnosis but do not definitely prove or exclude the presence of the condition.

Presumptive Tests: 1. *Total Serum Globulin:* Since about one half of the reported concentration is gammaglobulin, agammaglobulin may cause a low level of total globulin. 2. *Isohemaglutin Titers:* Agammaglobulinemic patients have a deficiency of isohemaglutinins and demonstrations of their absence during blood grouping is a good screening test for the disease in patients with blood groups O, A and B. The test is of no value for patients with blood group AB. 3. *Response to Antigenic Stimulation:* Patients with the disease have persistently positive Schick and Dick reactions. 4. *Zinc Sulfate Turbidity Test:* This test has been recommended as a good screening test.[18] It gives a semi-quantitative estimate of the concentration of gammaglobulin in the serum. 5. *X-ray Findings:* Many patients with agammaglobulinemia show extensive pulmonary parenchymal disease with paradoxical absence of hilar node enlargement and striking deficiency of nasopharyngeal lymphoid tissue. In addition, many patients show a pansinusitis.[19]

Definitive Tests: 1. *Electrophoresis of Serum:* Paper electrophoresis is one of the most reliable screening tests for agammaglobulinemia. The technique is quite simple and only a small quantity of blood is needed. The gammaglobulin is usually reported as a percentage of the total protein per 100ml of serum. Normal value ranges from 12 to 16 per cent. The electrophoretic technique as described by Tiselius is also a satisfactory procedure but more expensive equipment is needed. 2. *Immunochemical Quantitation:* Immunochemical methods offer the only satisfactory means of measuring low concentrations of gammaglobulin.[17] The precipitin method is the best of these techniques. Such methods demonstrate that most of these patients have small amounts of gammaglobulin present, and therefore the term hypogammaglobulinemia is more appropriate rather than agammaglobulinemia. With these techniques it has been shown that patients with

acquired agammaglobulinemia have slightly more gammaglobulin than patients with the congenital type. In both types, the concentration seldom exceeds 100 mgs. per 100ml of serum.

Treatment

Antibodies and concentrated gammaglobulin have proven of value in the treatment of agammaglobulinemia. Therapy should be directed towards treating the acute infection and preventing recurrent infections with gammaglobulin. A dose of 0.1 gms. of gammaglobulin per kilogram of body weight intramuscularly every 30 days has given adequate protection to most patients. It should be noted that the prophylactic dose of gammaglobulin may vary in different patients due to the fact that gammaglobulin is a heterogenous substance containing many different antibodies which have varying rates of degradation (ranging from 17 to 58 days). The dosage of gammaglobulin is based on the life of injected gammaglobulin which ranges between 13 and 32 days.[20] A level of 100 to 150 mg. of gammaglobulin per 100ml of serum seems to be the minimum necessary to prevent infection, a level easily obtained by the injection of 0.1 gm. per kilogram of body weight.[8]

SUMMARY

A patient having hypogammaglobulinemia associated with pernicious anemia is reported. To our knowledge only three cases of agammaglobulinemia and pernicious anemia have previously been reported. One of these also had diabetes mellitus. Another had multiple allergies associated with this combination. The significance of the appearance of agammaglobulinemia and pernicious anemia in the same person is unknown. There have, however, been a number of reports of hematolgic aberrations associated with agammaglobulinemia. It is of interest that both of these diseases have hereditary tendencies. It is felt that our patient has not shown the usual susceptibility to bacterial infection because his level of gammaglobulin is still high enough to afford him some protection.

References

[1]Bruton, O. C.: Agammaglobulinemia. Pediatrics 9:722, 1952

[2]Sanford, J. P.; Favour, C. B., and Tribeman, M. S.: Absence of Serum Gammaglobulin in an Adult. New England J. Med. 250: 1027, 1954

[3]Good, R.; Zak, S.; Condie, R., and Bridges, R.: Clinical Investigation of Patients with Agammaglobulinemia and Hypogammaglobulinemia. Pediat. Clin. North America 7:397, 1960

[4]Lewis, E. C., and Brown, H. E., Jr.: Agammaglobulinemia Associated with Pernicious Anemia and Diabetes Mellitus. A.M.A. Arch. Int. Med. 100:296, 1957

[5]Crowder, R. V., Jr.; Thompson, W. T., Jr., and Kupfer, H. G.: Acquired Agammaglobulinemia with Multiple Allergies and Pernicious Anemia. A.M.A. Arch. Int. Med. 103:445, 1959

[6]Klayman, M. I., and Brandborg, L.: Clinical Application of Cobalt 60 Labelled Vitamin B_{12} Urine Test. New England J. Med. 253:808, 1955

[7]Wallenborn, P. A., Jr.: Agammaglobulinemia, Laryngoscope, 70:1-36, 1960

[8]Gitlin, D., and Janeway, C. A.: Agammaglobulinemia, Acquired and Transient Forms. Progress in Hematology 1:318, 1956

[9]Editorial: Interdisciplinary Exercise in Thinking. Mod. Med. 29:71, 1961

[10]Bruton, O. C.: Agammaglobulinemia: A Working Concept. Hawaii M. J. 16:147, 1956

[11]Orlandini, O.; Sass-Kortaak, S., and Ebbs, J. H.: Serum Gammaglobulin Levels in Infancy. Am. J. Dis. Child. 84: 632, 1952

[12]Pearce, K. M., and Perinpanayagam, M. D.: Congenital Idiopathic Hypogammaglobulinemia. Arch. Dis. Childhood 32:422, 1957

[13]Barr, D. P.: The Function of the Plasma Cell. Am. J. Med. 9:277, 1950

[14]Bjorneboe, M.; Gormsin, H., and Lundquist, T.: Further Experimental Studies in the Role of the Plasma Cells as Antibody Producers. J. Immunol. 55:121, 1947

[15]Gitlin, D.; Janeway, C. A.; Apt, L., and Craig, J. M.: Agammaglobulinemia in Lawrence, H. S., Ed.: Cellular and Humeral Aspects of the Hypersensitive States. Paul B. Hoeber, Inc. (New York), 1959

[16]Good, R. A., and Zak, S. J.: Disturbances in Gammaglobular Synthesis as Experiments in Nature. Pediatrics 18:109, 1956

[17]Barrett, B., and Volwiler, W.: Agammaglobulinemia and Hypogammaglobulinemia — The First Five Years. J.A.M.A. 164:866, 1957

[18]Good, Robert A.: Agammaglobulinemia and Immunology. Mod. Med. 23:86, 1955

[19]Margulis, A. R.; Feinber, S. B.; Lester, R. G., and Good, R. A.: Roentgen Manifestation of Congenital Agammaglobulinemia. Radiology 69:3, 1957

[20]Martin, C. M.; Gordon, R. S., and Felts, W. R.: Studies on Gammaglobulin. J. Lab. and Clin. Med. 49:4, 1957

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FUNCTIONING TUMORS OF THE OVARY

Rhode Island Hospital Experience, 1943-1958

HENRY C. MCDUFF, M.D.

The Author. *Henry C. McDuff, M.D., Surgeon-in-Chief, Department of Gynecology, Rhode Island Hospital.*

FUNCTIONING OVARIAN TUMORS are a very interesting group of neoplasms; all gynecologists, general surgeons, endocrinologists or internists are medically stimulated when the pieces fit, and an accurate diagnosis can be made. Any woman who appears overly masculine and a little hairy, and has a coarsened voice, flat breasts, and a male escutcheon is immediately suspected of having arrhenoblastoma. Similarly, precocious menstruation and post-menopausal bleeding arouse interest in granulosa cell and theca cell tumors. The disappointing thing is that these tumors are quite rare, the suspected arrhenoblastoma usually turning out to be familial or functional hypertrichosis, and the granulosa cell tumor a polyp, endocrine dysfunction, or endometrial carcinoma.

Granulosa cell tumors represent about 3 per cent of all ovarian tumors; thecomas, dysgerminomas, and arrhenoblastomas are even more rare. All tend to be unilateral, and except for the thecomas, have a high incidence of malignancy, the potential of which varies in direct proportion to the pathological grading of the tumor. This is a feature common to all types of ovarian carcinoma, as emphasized by Taylor, and is very important in prognosis. This finding is in direct variance to that in cervical carcinoma, where pathological grading is of little if any value prognostically.

In the past 15 years, 27 functioning ovarian tumors have been seen at the Rhode Island Hospital. There were 12 granulosa cell tumors and 11 thecomas. Either group tends to show a mixture of both types of estrogen-producing cells, and is classified according to the predominant cell type. These tumors are rarely of pure cell type. There were also two arrhenoblastomas and two dysgerminomas. It is recognized that dysgerminomas are not functioning tumors, but their over-all behavior warrants their consideration in this group. Figure 1 shows the reported incidence of malignancy in the literature, compared to that at the Rhode Island Hospital.

Department of Gynecology, Rhode Island Hospital.

TYPES OF TUMOR

TYPE	NO.	MALIGNANCY Reported	MALIGNANCY R.I.H.
ARRHENOBLASTOMA	2	12-25%	100%
DYSGERMINOMA	2	25-50%	100%
GRANULOSA CELL CA.	12	28-35%	58%
THECOMA	11	0%	0%
	27		41%

IF THECOMA IS OMITTED MALIGNANCY RATE 68%

DEGREE OF MALIGNANCY VARIES WITH PATH. GRADING

FIGURE 1

These tumors apparently can occur in any age group, particularly the granulosa cell and theca cell tumors. Both of our dysgerminomas were found before the age of 20, while the arrhenoblastoma patients were 41 and 20 years of age at the time of clinical recognition (Figure 2).

Eighteen of these 27 patients were married, and six, or 33 per cent, of these were childless, about twice the national average, and about the reported incidence of infertility in ovarian carcinoma in general. The age of menstrual onset was 11 to 14 years in all except the nine-year-old child. It is of interest that very recent follow-up revealed that this child noted her first menstrual period at 10½ years (Figure 3).

Most gynecological admissions for whatever cause would be concerned historically with bleeding, or the lack of it, abdominal pain, or abdominal swelling, so that the analysis of these symptoms is not particularly enlightening. Acne and hirsutism, however, which are unusual, were prominent symptoms in our 20-year-old arrhenoblastoma patient. Most women can accept with grace a little de-feminization, but at the subsequent appearance of masculinization they seek medical help (Figure 4).

Four of these patients had had previous curettage and radium, one of them three times, before the cause was found to be a functioning ovarian tumor. Our one fatal case of arrhenoblastoma was operated on two years previously for a ruptured tubal pregnancy, and her ovaries were reported as normal at that time.

AGE	
SPAN	9 - 84 yrs.
AVERAGE	46.3 yrs.
BEFORE AGE 35	8 - 30%
BEYOND AGE 35	19 - 70%

FIGURE 2

MARITAL STATUS AND PARITY	
Total cases	27
Married	18
Parous	12
Childless	6 or 33%
Onset of Menses	11 - 14 yrs. in all

Fig. 3

SYMPTOMS	
Vaginal bleeding	13
Abdominal pain	6
Abdominal swelling	5
Amenorrhea	5
* Hirsutism	1
* Acne	1
Infertility	1
Constipation	1

* Both occurred in arrhenoblastoma as presenting complaint.

Fig. 4

The only significant laboratory findings were elevated 17-ketosteroids in the arrhenoblastomas, anemia in those partients who bled too much, and distortion of the barium enema and intravenous pyelogram in many patients with large pelvic tumors.

Just as the symptomatology of these patients seemed to parallel other gynecological admissions, so were the pelvic findings in all cases strikingly similar; the main finding suggesting surgery was a pelvic mass. Twenty-two of 27 patients presented with a pelvic mass. The remaining five had normal pelvic findings. The first was operated on for infertility, and a bilateral wedge resection was done. She was found to have a thecoma, and she did well postoperatively. She now has two children, both adopted. The second patient had had three previous curettages, two with radium implantation, and had breakthrough bleeding each time. Finally at age 69 a total hysterectomy and bilateral salpingo-oophorectomy were done. She had a granulosa cell carcinoma of the ovary, and was living and well three years after surgery. The third patient was 21 years of age, and her primary complaint was amenorrhea. She could be made to bleed periodically with cyclic hormone replacement. Following an arrest she again became regular after low dosage irradiation of her ovaries. She was suspected of presenting a Stein-Leventhal syndrome; a left oophorectomy was done in conjunction with a resection of the right ovary. She was found to have a benign granulosa cell tumor, and has done well since, with regularly established menstrual periods.

The fourth patient presented with post-menopausal bleeding at the age of 55. A biopsy revealed endometrial carcinoma, and the pathology report following definitive surgery showed endometrial carcinoma and a thecoma of the left ovary. The coexistence of these two lesions is well known to all. The reported incidence, however, of carcinoma of the endometrium complicating these tumors is 10 to 20 per cent greater in thecomas than in granulosa cell tumors. In our 12 cases of granulosa cell tumor there was one case of endometrial carcinoma, an incidence of 8.3 per cent. This patient was 64 years of age and was found to have a benign granulosa cell tumor of the ovary, as well as endometrial carcinoma and adenocarcinoma of the opposite ovary. The pathologist considered this to be a benign granulosa cell tumor of the ovary, with secondary stimulation of the endometrium, resulting in endometrial carcinoma, which subsequently metastasized to the opposite ovary. There was, as previously mentioned, one case of endometrial carcinoma in the 11 theca cell tumors, an incidence of 9.1 per cent. The fifth patient with negative physical findings had post-menopausal bleeding at the age of 67. The curettings showed a high follicular endometrium; and Doctor Arthur Hertig, who reviewed the slides, suggested the possibility of a functioning ovarian tumor. At the time of definitive surgery she was found to have a thecoma of the ovary.

Of the 23 patients presenting granulosa cell tumors and thecomas, 18, or 80 per cent, showed endometrial hormone effect; and as previously mentioned, two had endometrial carcinoma.

I have previously mentioned the high incidence of malignancy in these tumors; that is, in all except the thecomas. The literature and our personal experience, however, teach us that these are tumors of low malignancy. If this is true, and if recurrences are solitary and easily removed, and if as is said they are as a group highly sensitive to radiation, can we then not modify our concepts of surgery of malignant tumors in these cases? In other words, can we recommend radical surgery after age 35, and conservative surgery before? Can we recommend a little operation for a little cancer, and a big operation for a big cancer?

I think perhaps we can if certain criteria are met: 1. Cul-de-sac aspiration smears should be obtained in all cases of ovarian tumors. 2. Any operation which requires the removal of one ovary should similarly require resection of the other. 3. Any operation which involves ovarian removal or resection, and which preserves the uterus should be attended by a dilatation and curettage.

Figure 5 shows the type of surgery done as related to the patient's age. Only one radical procedure was performed before the age of 35, and

concluded on next page

TYPE OF SURGERY
ACCORDING TO PATIENT'S AGE

Age		Conservative	Radical	Survival
To age 35	(4)	8	1	9-100%
Beyond age 35	(7)	2	16	13- 27.7%

Numbers in parentheses represent positive malignancy.

Fig. 5

all in this age group have survived. Two were dysgerminomas, and one of these had two recurrences treated successfully with radiation. Both have subsequently borne children. The one radical operation was performed for a bilateral arrhenoblastoma. The original operation was a left salpingo-oophorectomy and a resection of the right ovary, which at operation appeared to be perfectly normal. Tumor cells were found in the resected ovarian segment; a hysterectomy and removal of the residual ovary were carried out one week later. This clearly indicates the benefit of ovarian resection. These tumors are usually unilateral, but in 5 to 15 per cent of cases they are bilateral. Survival to date in this group is 100 per cent, and four of the eight patients who had conservative operations have subsequently borne children.

The remaining 18 cases occurred beyond the age of 35; two were managed conservatively, and 16 by radical procedures. Five of these patients were inoperable when first explored, and these cases represent our only fatalities. There were four granulosa cell tumors, and one arrhenoblastoma in this inoperable group.

TYPE OF SURGERY

TUMOR		CONSERVATIVE Benign	CONSERVATIVE Malignant	RADICAL Benign	RADICAL Malignant	SURVIVAL
Arrhenoblastoma	2				2	1- 50%
Dysgerminoma	2		2			2-100%
Granulosa Cell Ca.	12	3	1	2	6*	8- 67%
Thecoma	11	4		7*		11-100%
TOTAL	27	10		17		22- 81%

*Carcinoma of endometrium (one case in each group).

Fig. 6

Figure 6 illustrates the type of surgery performed in all groups, and the comparative survival rates. As might be expected we report a 100 per cent survival rate in the thecoma group. Four of the five deaths occurred in the granulosa cell carcinomas, a survival rate of 67 per cent. One arrhenoblastoma patient died, and I am of the opinion that the other represents a permanent cure. We also report 100 per cent survival in the dysgerminoma group, although one patient has already had two recurrences, which have responded to radiation.

Over-all the survival rate is 81 per cent, and all deaths occurred in patients treated beyond the age of 35. No case managed conservatively has died.

Conclusions

1. Twenty-seven cases of functional ovarian tumors seen at the Rhode Island Hospital from 1943 to 1958 have been reviewed.

2. There should be continued vigilance in recognizing these tumors. We suggest that all cases be reported to some large central tumor registry, so that more can be learned as larger series are surveyed.

3. A plea is made for conservative surgical treatment in the younger age group.

4. An over-all survival rate of 81 per cent is presented, and 100 per cent survival in the age group under 35 years.

Bibliography

[1]Allan, M. S., and Hertig, A. T.: Carcinoma of the Ovary. Obst. & Gynec. 58:640, 1949

[2]Diddle, A. W.: Granulosa-and theca-cell Ovarian Tumors: Prognosis. Cancer 5:215, 1952

[3]Dockerty, M. B., and MacCarty, W. C.: Arrhenoblastoma. Surg., Gynec. & Obst. 68:767, 1939

[4]Dockerty, M. B., and Mussey, E.: Malignant Lesions of the Uterus Associated with Estrogen-Producing Ovarian Tumors. Am. J. Obst. & Gynec. 61:147, 1951

[5]Hesseltine, H. C., and Smith, R. L.: Ovarian Malignancy. Am. J. Obst. & Gynec. 72:1326, 1956

[6]Javert, C. T., and Finn, W. F.: Arrhenoblastoma. The Incidence of Malignancy and the Relationship to Pregnancy, to Sterility, and to Treatment. Cancer 4:60, 1951

[7]Jones, G. E. S., and TeLinde, R. W.: The Curability of Granulosa-cell Tumors. Am. J. Obst. & Gynec. 50:691, 1946

[8]Mansell, H., and Hertig, A. T.: Granulosa-Theca Cell Tumors and Endometrial Carcinoma: A Study of Their Relationship and a Survey of 80 Cases. Obst. & Gynec. 6:385, 1955

[9]Morris, J. M., and Scully, R. E.: Endocrine Pathology of the Ovary. C. V. Mosby Co., 1958

[10]Novak, E.: Report of the First 50 Cases of the Ovarian Tumor Registry Conducted by the American Gynecological Society. Am. J. Obst. & Gynec. 48:861, 1944

[11]Taylor, H. C. Jr., and Millen, R.: The Causes of Vaginal Bleeding and the Histology of the Endometrium After the Menopause. Am. J. Obst. & Gynec. 36:22, 1938

[12]Twombly, G. H.: Luteoma of the Ovary. Am. J. Obst. & Gynec. 51:832, 1946

[13]Kent, S. W., and McKay, D. G.: Primary Cancer of Ovary: Analysis of 349 Cases. Am. J. Obst. & Gynec. 80:430, 1960

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MEDICAL RESEARCH IN ISRAEL

Physical Work and Myocardial Infarction

The members of a communal settlement in Israel all have the same standard of living, whatever work they do; thus, clerks, agricultural workers, teachers and drivers live under the same environmental conditions. This gives an excellent opportunity for evaluating the effect of physical work as a factor in the etiology of coronary disease.

Doctor D. Brunner and Doctor G. Manelis, of Donolo Hospital, Jaffa, have recently published in the LANCET a ten-year survey of 8,500 people living in communal settlements, who were between 35 and 50 years of age in 1949. During the period, there were 111 proved cases of myocardial infarction, including 34 fatal cases. For non-sedentary male workers, the annual incidence of myocardial infarction was 1.36 per thousand, whilst the rate for sedentary workers was 4.1 per thousand. Thus the rate for sedentary workers was three times that for non-sedentary workers; the mortality rate was also three times greater in the former group.

Although Jews are reputed to be especially prone to coronary disease, the authors note that the rate which was found in sedentary workers in Israel communal settlements is almost identical with that reported for sedentary workers in London. The findings underline the importance of physical exercise as a factor in the prevention of myocardial infarction.

The Effect of a New Environment on Oriental Jews

The Yemenite Jews are of special interest in medical research. They form a homogeneous group who have their own way of life and who have had little inter-marriage with other groups. Although the immigration of Jews from Yemen started many years ago, the majority of the community came here very soon after the foundation of the State of Israel.

Doctor A. M. Cohen of Hadassah University Hospital, Jerusalem, writing in HAREFUAH, has investigated the incidence of diabetes mellitus in Yemenite Jews. It was found that among those who had immigrated within the last ten years, the incidence of diabetes was only 0.06%, whilst in old settlers (who were either born here or had been here for over 25 years) the incidence was 2.9%. In a similar comparison of the Kurdish Jewish community, no cases of diabetes were found among 988 recent arrivals, but in 598 "veterans" the incidence was 2%.

In an article recently published in the LANCET, Doctor Cohen, together with Doctor E. Neumann and Professor I. C. Michaelson, have investigated the incidence of hypertension and of retinal involutionary sclerotic changes among Yemenites over the age of 30. In 147 recent arrivals, there were only 4 cases of hypertension, whilst among 125 "veterans," there were 17 cases. Involutionary sclerotic changes in the retina (unassociated with diabetes or hypertension) was also considerably commoner in the old settled group than in the recent arrivals.

There are great differences between conditions of life in Israel and Yemen, and there is little doubt that the increased prevalence of diabetes, hypertension and sclerotic changes in the retina among the long settled Yemenites are a result of new conditions of life prevailing in Israel. It is probable that new dietary habits and the increased pace of the Western style of living are the factors responsible.

... Excerpts from Quarterly Review of the M. H. H. (Non-Resident Fellowship of the Israel Medical Association), Vol. 1, No. 1, Jan.-March, 1961, Jerusalem.

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Editorials

WELFARE AND SECURITY

IN THE MIDST of the welter of public statements and reports on the problems of welfare costs and social security benefits for all, we are encouraged by the recent stand of Rhode Island's senior Congressman, Honorable John E. Fogarty, that government undertake a "thorough searching study" of the increasing federal welfare costs in the face of recent public uprising.

The uprising possibly refers to the controversy in New York state when the city of Newburgh cracked down on relief beneficiaries, setting forth proposed reforms that no one except the blind, aged and disabled may receive relief more than three months in any one year, that unmarried mothers are barred from relief if they have more illegitimate children, and that able-bodied men on relief must work 40 hours a week for the city.

The uproar that followed Newburgh's stand won nationwide attention, and drastic action by the New York State Welfare Board which forced the city fathers of Newburgh to drop their proposed program to correct what they considered flagrant welfare abuses, on the grounds that the action by the city was illegal under both state and federal law.

Mr. Fogarty may well ask that the Congress take a long hard look at the problem, for it was the Congress that made federal aid to dependent children funds available to families of unemployed men last May, and it was Congress that barred payment of federal relief money to men on relief *who do any work for their communities*. Thus New York halted virtually all work-relief programs in fear of losing some 16 million dollars in U.S. Welfare payments! Little wonder then that the state had to tell Newburgh to drop its proposed new relief policies because the federal government insists on uniform relief programs in all states that want to qualify for federal matching funds.

In the thorough searching study Mr. Fogarty proposes, he is reported as suggesting, among other matters, that such a review look into such matters as "the best distribution of financial responsibility between federal, state and local governments; eligibility standards for welfare recipients; residence and property-income limitations; . . ." We heartily concur, and we hope that the study may be by persons impartial enough to point out how the federal government is dictating how relief shall be administered at local levels.

In the news story of Mr. Fogarty's letter to Abraham Ribicoff, secretary of Health, Education and Welfare, the Congressman was reported as dissatisfied with explanations so far advanced for constantly climbing welfare expenditures in the face of a twentyfold expansion of the Old Age and Survivors program during the same period. Most people, he is reported as saying, expected the latter development to mean a gradual reduction in other welfare costs.

The "thorough searching study" that Mr. Fogarty advocates might well embrace an exhaustive review of the social security system. By political action the benefits are sweetened at least every election year on the premise that such additions cost very little. The ever increasing deficiencies postponed to some distant date, and the obvious inequities that materialize, are never publicized.

Thus, in the Congressional session just ended, a total of 10.7 billion dollars has been added to the fiscal burden of the government in the first seven months of this year, and 6.2 billion dollars of the increase is made up of sums added for welfare spending, education, housing, public works, the Peace Corps, the general administration of the government and all the rest, and 4.5 billion dollars is attributed to defense costs.

The control over the appropriation of money is one of the most important of the constitutional powers of Congress. Mr. Fogarty, as chairman of the House appropriations subcommittee handling money allocations for health, education and welfare is certainly in a key position to influence the Congress to take the long, searching look at federal welfare expenditures that he advocates. We hope he will press his point when the Congress reassembles next month, and that the study will also include a clear-cut analysis of the true cost of social security coverages, and the impact of these programs on private initiative which made this country the great nation it is.

RHODE ISLAND MEDICAL JOURNAL
December, 1961 — Vol. XLIV, No. 12

WHAT IS IT ALL ABOUT?

We have not previously commented upon the recent politically motivated efforts by labor officials and certain politicians to discredit the Medical Profession in Rhode Island and more specifically the Rhode Island Medical Society Physicians' Service. We have an overpowering suspicion that this great activity is merely a local manifestation of the nationwide campaign of organized labor to harass the Medical Profession. The strategy of divide and conquer is much in evidence on the local scene. Segments of labor abetted by self-seeking politicians will not rest until they have attained control of the practice of medicine with a view to accomplishing cradle-to-grave medical care financed by employers or the government. This objective cannot be attained without serious impairment of the quality of medical care and discouragement of the consistent and conscientious pursuit of excellence characteristic of American Medicine in 1961. One of our respected medical elder statesmen in Rhode Island has wondered at this great injustice perpetrated by our violent critics at a time when the quality of patient care, degree of physician training, intensity of self-examination and self-policing, and the standards of medical ethics are the highest in the history of medicine. It is not sufficiently well understood by the public that the erosive effect of attacks such as we have been exposed to constitute one of the important influences causing the recent substantial drop in the quality of students willing to enter the long and rigid training and discipline required for a career in medicine (43 per cent "A" students entering medical school in 1950 as compared to 15 per cent in 1960). We have no doubt that the present attacks on Physicians' Service are designed either to bring about its control by political and labor groups or, failing this, its destruction.

We shall confine our further remarks to two matters, the "180 cases" of "abuses" which have preoccupied the daily press, and the recommendation of Governor John A. Notte that the Physicians' Service Charter be amended by the General Assembly to provide "public" control of its Board of Directors.

In the first matter we can say only that until the cases are properly documented and objectively and intelligently studied they constitute little more than innuendo and hearsay. Published on the next page is the formal proposal made on December 3, 1961, by the President of the Rhode Island Medical Society to study the so-called 180 cases by the Grievance Committee of this Society in the presence of impartial observers appointed by the Rhode Island Bar Association. The complainants have been offered the opportunity to be represented by counsel, either their own or that of their labor union. The offer to study these cases was made in sincere good faith and in accordance with the long-standing desire of the medical profession to police and discipline its own ranks. It ill behooves labor to reject this offer out of hand and casts serious doubt on their motives and sincereity. We resent such disparagements as "whitewash" and "kangaroo court." Other methods of investigation and discipline are provided by law if they are preferred. There is, however, absolutely no justification for playing politics by the discredited methods of partial disclosures, inadequate investigation, legislative sideshows, and innuendo. The offer previously made still stands. To quote our own daily press, which has not always been sympathetic to the profession, let the mouth-pieces of labor either "put up or shut up."

The other matter that must be faced realistically is the proposal to remove the control of Physicians' Service from the medical profession. The heart of this plan lies in the service benefit provisions for under-income subscribers according to the several contracts. This public service is provided by participating physicians under contract on a voluntary basis. It is our emphatic conviction that service benefits and public control are absolutely incompatible. We are willing to predict that a radical change in the government of the plan will result in resignations of participating physicians sufficient to make it inoperative in its present form. This is a considerable onus for our legislators to assume. A plan as advantageous to the public as our Physicians' Service would be difficult to replace. But if they elect to wreck the plan in this irresponsible way, we want to be on record as having warned them.

THE RHODE ISLAND MEDICAL SOCIETY

106 Francis Street, Providence 3, Rhode Island

December 3, 1961

Mr. Thomas Policastro
President
AFL-CIO of Rhode Island
356 Westminster Street
Providence, Rhode Island

Dear Mr. Policastro:

The Rhode Island Medical Society is extremely shocked at the accusations your association is making against some of our members of alleged abuses of the Physicians' Service Plan. It is shocking because these physicians are judged guilty by you before they are given the opportunity to be heard and before any evidence is submitted. It is also unfair under the American tradition that a person is innocent until proven guilty beyond reasonable doubt. So far we have only allegations, insinuations and innuendo by your spokesman, but no incontrovertible evidence of guilt.

The Rhode Island Medical Society concerns itself not only with the professional competency of its members but also with their ethical conduct. We have a strict code of ethics that every member must accept. We have a proper committee — the Grievance Committee — which has been set up to consider any deviations or violations of our code of ethics. This committee seeks not only to insure that the people of our State receive good medical care, but also that they shall be protected from any unscrupulous act on the part of any doctor. They act on any complaint properly presented to them from any source whatsoever. When a doctor has been found at fault, such fault has been corrected and punitive action has been resorted to when deemed necessary.

To eliminate any doubt of a fair hearing the Grievance Committee will invite the complainant to attend the meeting at which his complaint will be heard and, if he so desires, he may bring his own or the Union's attorney so long as such attorney is licensed to practice in this state. Further, the Grievance Committee is prepared to ask the President of the Rhode Island Bar Association to appoint disinterested attorneys, selected from past presidents or current officers, to attend the hearings as representatives of the public; such person would be permitted to examine the complainant or doctor concerned and while having no vote he could make, if desired, a separate report to the public on any case submitted. Because of the number of alleged cases. I would consider it fair to ask only one of these public representatives to attend each hearing.

In the interest of fairness to the public and to the physicians involved, we ask that you submit immediately in writing your factual data on all cases. This will permit the Committee to divide the complaints into definite categories and so to expedite the investigation. I will instruct the Committee to hold, so far as possible, at least one evening meeting a week. Each alleged abuse will be investigated in detail, and appropriate action will be taken by the Society against any of its members found guilty of violating their trust. Periodic reports will be made to the public by the Society.

In the light of the damaging allegations that have been made by your spokesman, your failure to cooperate with the Rhode Island Medical Society can only be construed to be evidence that the facts do not sustain the claims.

Very truly yours,

(signed) SAMUEL ADELSON, M.D.
President

III. HYPOCRISY IN THE DAILY PRESS

IN *The Evening Bulletin* (Providence) of November 9, 1961, this bold heading appears on the editorial page: "R. I.'s Medical Profession has a Disciplinary Problem."

A few pages farther on in the same section appears the following advertisement: "Don't Let Sluggish Kidneys cause BACKACHE. Why suffer from backache, loss of energy or body pains often caused by Simple Kidney Slowdown? Try ——'s Pills for analgesic relief of pain. ——'s Pills also give stimulating diuretic action to help increase Kidney output and reduce minor bladder irritations. For palliative relief of symptomatic troubles caused by Sluggish Kidneys . . . Try ——'s Pills."



WHAT IS OVER-UTILIZATION?

INCREASING COSTS for Blue Cross and Physicians Service have recently resulted in wholesale recriminations against these plans.

Among the allegations is the unproved claim that doctors over-utilize hospitals for their own convenience. What patients should be in the hospital and how long they should stay are elusive problems that no one is better able to decide than the individual physician. Nowhere is the abuse of over-utilization better demonstrated than in veterans' hospitals. Rhode Island general hospitals now quite universally have created utilization committees to police themselves. Unfortunately efforts to reduce costs by controlling this form of utilization cannot be considered the answer.

The basic problem of costs turns on a more significant fact. Every occupied hospital bed in Rhode Island is a primary cost to Blue Cross and Physicians Service when occupied by a subscriber. Increase the number of beds and costs increase; decrease the number of beds and costs decrease. But a single hospital bed, whether occupied by one person for fifty days or five persons for ten days each, represents a relatively constant cost. In fact, an argument can be made to show that longer periods of hospitalization are cheaper because high initial admission expenses are reduced in frequency.

The essence of the problem is that Blue Cross and Physicians Service gain by keeping people out of hospitals, and hospitals gain by full occupancy. The doctor is the victim in the middle, struggling to reduce utilization forced on him by the pressure of illness of his patients and his own medical success. A curious, rarely emphasized aspect of Blue Cross and Physicians Service is the

concluded on next page

fact that premiums are collected, but no guarantee exists that any collection of benefits will ever be possible, except that a hospital bed happens to be vacant. The hospitals of Rhode Island by steady increases in number of beds are busy making sure that beds are available, and this will continue to skyrocket costs — utilization committees notwithstanding.

PHYSICAL FITNESS AND THE ARMED FORCES

SOME WEEKS AGO we noted the following news item datelined Washington, D. C., in a Dublin newspaper: "Unfit Americans Worry Forces. Since October, 1948, United States medical examination centers have rejected more than a million men as physically unfit for military service as volunteers or national servicemen. In the past year they have been turning away more than 1,000 a month who would have passed if they had kept themselves in good physical shape. President Kennedy has urged schools to pay more attention to cultivating physical fitness."

We would not choose to take issue with our youthful President, himself a devotee of the rigors of touch football and the rocking chair, over the virtues of physical fitness. Certainly no high school or college student was ever harmed by required setting-up exercises (à la Bonnie Pruden), or modern dance, or even organized sports. Perhaps some may even be benefited by these largely time-wasting pursuits. But the implication that this type of activity has even the remotest relationship with the rate of medical rejections by the armed forces is pure nonsense.

There have been, of course, rejections for such classical reasons as mitral stenosis, chronic nephritis, and active tuberculosis. Any grizzled veteran among us knows, however, that the great bulk of rejections are for such disorders as flat feet, sinusitis, hay fever, varicose veins, hemorrhoids, hernia, perforated ear drum, 20/200 vision, epilepsy, mental retardation, idiocy, and even such exotic complaints as bed wetting, and preferring the company of boys to that of girls.

It is well-known, of course, that many superb athletes have terrible feet and can barely walk off the playing field. In fact a famous home-run hitter of recent decades wore space shoes because his feet caused him so much misery. During World War II the major league baseball teams were largely manned by military rejects.

All of which we submit has absolutely nothing to do with "physical fitness."

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Chlorpheniramine maleate	0.75 mg.
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Bright red, pleasant tasting, raspberry flavored syrup

Dosage:

Children from 6 months to 1 year, 1/4 teaspoon; 1 to 3 years, 1/2 to 1 teaspoon; 3 to 6 years, 1 to 2 teaspoons; 6 to 12 years, 2 teaspoons. Every four to six hours as needed.

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DISTRICT MEDICAL SOCIETY MEETINGS

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, October 9, 1961. The meeting was called to order by Doctor J. Merrill Gibson, vice president, who presided in the absence of Doctor Fratantuono.

The minutes of the April meeting, published in the RHODE ISLAND MEDICAL JOURNAL, were approved as published.

Report of the Secretary

Doctor William A. Reid, secretary, reported for the Executive Committee as follows:

Since the April meeting the Executive Committee has met to review applications for membership and to consider other matters of business for the Association.

The Committee has approved of the transfer of membership from active to associate for Doctors Joseph Tarantino and Tseh-Han Chen, both of whom are to be active members in the Kent County Medical Society. It also approved of the transfer to active membership in the Providence Medical Association of Doctor Louis M. Sod, formerly a member of the Pawtucket Medical Association.

The Committee reviewed the action of the president in soliciting members to staff polio clinics in June and July, and it approved of the nomination of Doctors Edward J. West, Jeremiah A. Dailey and Joseph H. Dwinelle as the Association's representatives on the Medical Advisory Committee of Providence County for the National Foundation.

The Committee approved of the formation of a Providence Association of Medical Assistants along the lines proposed in a constitution and by-laws submitted to the executive committee, and it named Doctors Frank Fratantuono, J. Merrill Gibson, and Robert V. Lewis to serve on the Advisory Committee to the new organization for the coming year.

Announcements by the Vice President

Doctor Gibson reported that since the April meeting the Association had recorded the death of two members, Doctor Frank T. Fulton, who was President of the Association in 1921, and Doctor Morris Botvin. A moment of prayer was conducted in memory of these members.

Doctor Gibson notified the members of various medical meetings to be held within the Greater Providence area within the month, and he urged support of the meetings by the members of the Association.

Election of Members

The secretary reported that the Executive Committee had approved of the nominations of the following physicians as active members of the Association: Harold L. Beddoe, M.D.; Tse-Ping Chen, M.D.; Robert L. Curran, M.D.; Stephan I. Frater, M.D.; Irving T. Gilson, M.D.; Tadeusz A. Gotlib, M.D.; William A. Marshall, M.D.; Baruh B. Motola, M.D.; Manuel Saborio, M.D.; Robert P. Sarni, M.D.; and Zygmunt W. Skomoroch, M.D.

A motion was made, seconded and passed that the members nominated for active membership be elected.

Scientific Program

Doctor Gibson introduced Mr. Myron Macht, of New York City, the head of the field department of the Automotive Crash Injury Research of Cornell University, who discussed the work of his group and its role in the reduction of highway death and accident injury toll.

A motion picture in sound was shown in which the importance of safety devices in automobiles, particularly seat belts, was demonstrated.

There was discussion of the subject by the members and guests present.

A motion was made by Doctor Irving Beck, as follows:

"*WHEREAS* injury and death due to automobile accidents have reached the staggering figures of 4,000,000 and 38,000 per year respectively, and —

"*WHEREAS* these accidents form the major portion of the leading cause of death — trauma — in our youth, and —

"*WHEREAS* it has been conclusively shown that car design may be easily improved to minimize the severity of such accidents by effectively restraining anti-ejection apparatus (viz., seat belts with factory built-in front and rear

anchorages); doors that will not open on impact; seats and cushions that will not become displaced on impact; energy-absorbing interiors; recessed instrument panels; and other devices recommended by medical and safety authorities; and

"*WHEREAS* the contention of executives of the auto industry has been that there is insufficient public demand for these improvements, and they, therefore, are not sales inducements; and they have been quoted as ignoring or rejecting the advice of those concerned with auto safety, and

"*WHEREAS* it is the responsibility of the medical profession in general to initiate measures to improve the public health,

"*THEREFORE BE IT RESOLVED* that this association be on record as approving the principle that the incorporation of safety devices as listed previously is a prime responsibility of the automobile manufacturer; that this should be done voluntarily in the public interest, and that if the industry continues to put style and speed above safety that legislation to this effect will be necessary, and

"*BE IT FURTHER RESOLVED* that a copy of this resolution be sent to the appropriate executive of each of the major automobile manufacturers, and to each of their local sales agencies."

The motion was accepted in principle with referral to the Executive Committee of the Association for implementation.

Adjournment

The meeting adjourned at 10:15 P.M.
Collation was served.
Attendance was 94.

Respectfully submitted,
WILLIAM A. REID, M.D., *Secretary*

NEWPORT COUNTY MEDICAL SOCIETY

A Joint Meeting of the Newport County Medical Society and the Naval Medical Officers of the Naval Hospital, Newport, R. I., took place at 8:15 P.M., September 20, 1961, at the Officers Club, U. S. Naval Base, with Capt. Joseph L. Yon, Commanding Officer of the Naval Hospital, presiding.

To terminate the two years of close, harmonious professional relationship between these two medical groups, Capt. Yon was instrumental in obtaining the consent of the Admiral and Naval War College Staff for a demonstration of the Naval Electronic Warfare Simulator to the entire medical staff of the Newport Hospital.

This demonstration, under the aegis of Capt. Chandler Swanson and his entire personnel, showed once again the goodwill of the Navy, in giving unstintingly of their time to create a close relationship with civilian medicine.

The evening was appreciated as most instructive and fascinating by the entire Newport Hospital staff.

The demonstration was followed by cocktails and dinner at the Officers Club.

The meeting adjourned at 10:30 P.M.

JOSÉ M. RAMOS, M.D., *President*

NEWPORT COUNTY MEDICAL SOCIETY

The Naval Medical Officers of the Newport Naval Hospital and the Newport County Medical Society and their wives held a joint meeting at the Hotel Viking on Wednesday, November 8. Seated at the head table were Rear Admiral Charles Buchanan, Captain Joseph Yon, USN, MC, Commanding Officer, Newport Naval Hospital, Captain Jesse Suder, USN, MC, Executive Officer, Newport Naval Hospital, Captain Ernest H. Joy, Senior Medical Officer, Atlantic Fleet Destroyers and Donald Fletcher, M.D., Vice President of the Newport County Medical Society and Samuel Adelson, M.D., President of the Rhode Island Medical Society. Following the dinner, Cdr. Raoul Lopez of the Chilean Navy gave a talk on the historical and political development of Chile.

RICHARD R. KNOWLES, M.D., *Secretary*



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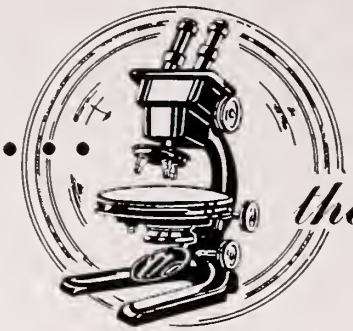
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American Museum of Health Planned for World's Fair

An American Museum of Health has been granted a charter, as an educational institution, by the Board of Regents of the University of the State of New York, according to Doctor Robert L. Levy, chairman of the Board of Trustees of the new corporation. A national advisory group of distinguished leaders in medicine, public health and related fields, is now being formed to assist in the development of a program for the Museum.

The newly-created institution will erect a $3,500,000 Hall of Medicine and Public Health at the World's Fair 1964-1965 in New York City. Robert Moses, president of the Fair Corporation, said the Fair looks forward to an outstanding exhibit supported by local and national health and related organizations.

In view of the national significance of the Museum and in recognition of the public interest that will be served by a medical and health pavilion, Fair officials have agreed that 70,000 square feet of space will be made available in the special exhibits area of the Fair.

This pavilion, which will be the principal agency for medical and health exhibits at the Fair, will be developed with the view of establishing a permanent Health Museum in New York City prior to the termination of the Fair, Doctor Levy said.

Five Rhode Islanders Inducted by College of Surgeons

Approximately 1,103 surgeons were inducted in Chicago last month as new Fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual five-day Clinical Congress of the world's largest organization of surgeons. The A.C.S., founded in 1913 to establish standards of competency and character for specialists in surgery, has grown in 48 years' time from a founding group of 450 to a total membership of approximately 24,500 in 71 countries.

Fellowship, entitling the recipient to the designation, "F.A.C.S.," following his name, is awarded to doctors who fulfill comprehensive requirements for acceptable medical education and advanced training as specialists in one or another of the branches of surgery, and who give evidence of good moral character and ethical practice.

Doctors receiving this distinction from Rhode Island at the 1961 convocation were as follows: *Pawtucket*, Stephen J. Hoye; *Providence*, Thomas F. Head, Rudolph W. Pearson, Mendell Robinson; and *Westerly*, James F. Martin.

McNeil Withdraws "Flexin" Products from Market

McNeil Laboratories, Inc., is withdrawing from the market FLEXIN® zoxazolamine and all FLEXIN-containing products, it was announced today by Robert L. McNeil, Jr., chairman.

This action, which also covers FLEXILON,® FLEXILON-HC,® and TRIURATE,® is being taken because certain clinical reports and observations submitted to the company by physicians suggest that FLEXIN may be associated with the development of hepatitis in an occasional hypersensitive patient.

In a letter mailed to physicians, Doctor James M. Shaffer, medical director of McNeil Laboratories, stated:

"The incidence of hepatitis associated with the use of FLEXIN and FLEXIN-containing products is low, but because it is extremely difficult to determine whether the hepatitis associated with the use of these drugs is of viral origin or drug-induced, it is considered in the best interests of all concerned to recommend that you discontinue the use of these drugs. If you have any samples of FLEXIN or the other drugs listed above, we request that they be destroyed."

British Study Shows Overweight Hazard

A pilot study on the death rates among persons with physical impairments, made by a large British

life insurance company and covering 11½ years of policyholder experience, corroborates the recent U.S. study of the Society of Actuaries which reported a much higher death rate among overweight persons.

The British study shows that the death rate among persons weighing 40 per cent or more above standard at time of policy purchase, was nearly twice the standard death rate. For persons underweight, the death rate was less than standard and for the weights between, the experience was very close to standard.

The British companies are giving consideration to making an inter-company study of impaired risks.

Comments from the Distaff Side

Women disapprove of specialists but love their pediatricians, delegates to McCall's Congress on Better Living meeting at Chicago stated.

The delegates felt their doctors are overworked. Said one woman, "He's so busy, I just don't feel I can sit down and talk with him." And another said, "I feel guilty asking him to come to the house when someone is sick." But the delegates definitely believed there are too many specialists. One said, "I have to make a complete diagnosis myself before I know which specialist to call." Several women complained their general practitioners too often send them to specialists. Said one, "I sometimes feel the G.P. is just a switchboard."

The women are not too fond of clinics. While they believe the doctors are competent, there is a definite feeling that clinics are too cold and impersonal. Said one delegate, "I'm just a number on a card." Many of the women said the clinic fees are too high and the waiting line is too long. A few delegates, however, said a clinic has several doctors available for consultation and is good "when you're new in town."

The women complained about the high costs of drugs, doctors' fees and hospital bills. But they all agreed when one woman said, "I'd pay a thousand times more if it will save a member of my family."

TB Drug Found 80 Per Cent Effective in USPHS Field Trial

Isoniazid, a drug widely used to treat tuberculosis, was 80 per cent effective in preventing the disease among more than 12,000 household contacts of newly discovered cases of tuberculosis, Doctor Luther L. Terry, surgeon general of the Public Health Service, announced recently.

During the year after a new case was discovered, daily doses of isoniazid taken under medical supervision offered marked protection to household contacts during a period when they were at high risk of developing the disease themselves. Whether this protection lasts is not known at this time, the Public Health Service said.

The announcement was based on the preliminary results of one of three field trials begun four years ago and involving 54,000 people in special risk groups. During the year after the source case was discovered, the tuberculosis rate for half of the household contacts, who took daily doses of isoniazid, was 0.2 per 1,000 in contrast to a rate of 6 per 1,000 among the half who were given placebos.

Kids, Health Outlays Grow Together

Although young people constitute a healthy segment of the population, they account for heavy medical and dental bills, according to the Health Insurance Institute.

Direct health expenditures for children up to age 5 go mostly for physicians' services, hospital care and medicines. Illnesses and injuries of an acute type—including everything from chickenpox, measles, mumps and sore throats to appendicitis and broken legs—are the most common ailments of younger children.

By the time junior enters school, his medical expenses have begun to decline, but dentists' costs start to soar.

The U.S. National Health Survey showed the average grade school youngster visits a physician less than four times a year, compared with six to seven annual visits for the pre-kindergartner, but a much higher proportion of dental work stems from the school-age group.

Between kindergarten and high school, young people see their dentists twice a year, on the average. The total number of visits annually in the 5-14 age group is estimated at 62 million; prior to age 5 fewer than one child in three sees a dentist and the annual total of visits is only 6 million.

The principal dental work required by children includes teeth straightening, often a costly procedure, as well as fillings and extractions.

Frequency of dental visits continues high for teen-agers, who average even more than two sessions with the dentist per year.

Teen-agers also consult physicians more often than children in the sub-teen years. Emotional and skin problems are common reasons for the consultations.

Automobile and other accidents, enemy No. 1 of children of all ages, are particularly dangerous in the teen years and tend to increase the volume of needed medical care.

Precise health expenditures cannot be pinned on any specific age group, but the more than 70 million children and youth in the U.S. probably run up a total medical bill of about $4½ billion annually, the Institute said.

The health care and services required by individual children vary tremendously, it added, and the amount a family spends to meet the needs of its

continued on next page

children depends on many factors, including sheer luck.

The Institute urged every family to take the guesswork out of health care costs by budgeting for the predictable expenditures and protecting itself with adequate health insurance to spread the risks of unexpected costs.

Autos Cited as Major Source of Air Pollution

Automobiles are a major source of air pollution, ranking first among nine leading sources cited in a special report on air pollution in the September issue of *Patterns of Disease*, a Parke, Davis & Company publication for the medical profession.

An analysis of air contaminants in Los Angeles County, as of January 1961, showed that automobiles released 965 tons per day of hydrocarbons, 250 tons of nitrogen oxides, 19 tons of sulfur dioxide, 6,850 tons of carbon monoxide, and 27 tons of aerosols. Ranking second as a source of air pollution are other modes of transportation, followed by the petroleum industry, combustion of fuels, use of organic solvents, metals, chemicals, incineration of refuse, and minerals.

The nation's cleanest air, according to *Patterns*, is to be found over deserts. "In general, air pollution seems to be more of a problem as the size of a community increases. In terms of the amount of suspended particulate matter in the air, urban air is about four times more polluted than the air in nonurban areas. Air over the dirtiest nonurban area is much cleaner than that over urban, or even suburban, regions. A significant difference has been found in and around an urban area in indoor as compared to outdoor air," *Patterns* reports.

"The level of organic air pollutants in urban areas in different regions of the nation is highest in the winter, followed by the levels in fall, spring, and summer in decreasing order. In the Gulf South, however, the levels in the winter and fall are almost identical," according to *Patterns*.

During fall months, the nation's highest level of organic air contaminants is in urban areas of the Pacific Coast. Second highest is in the urban areas of the Midwest, followed by Mid-Atlantic, Gulf South, Southeast, Mideast, New England, Rocky Mountain and Great Plains areas.

Merck Foundation Aids Residents and Interns

More than 100 resident physicians and interns in teaching hospitals received financial assistance from the George W. Merck Memorial Loan Fund in its second year of operation, it was announced recently by the Merck Company Foundation. Seventy per

1 2 3 4
clinical studies repeat...

ARLIDIN IMPROVES HEARING[1]
ARLIDIN IMPROVES HEARING[2]
ARLIDIN IMPROVES HEARING[3]
ARLIDIN IMPROVES HEARING[4]

Arlidin is available in 6 mg. scored tablets, and 5 mg. per cc. parenteral solution.
See PDR for packaging.
Protected by U.S. Patent Numbers: 2,661,372 and 2,661,373.

1 "significant hearing improvement" occurred with Arlidin in 32 of 75 patients with recent onset hearing impairment due to labyrinthine artery ischemia.
Rubin, W. and Anderson, J. R.: Angiology 9:256, 1958.

3 Arlidin "appears to be one of the most satisfactory [vasodilators], having the advantages of minimal side effects, being well tolerated and possessing a sustained action" in improving circulation of the inner ear.
Seymour, J. C.: Laryngology & Otology 74:133, 1960.

cent of the loans went to residents, who generally have greater family responsibilities than interns and hence encounter more financial emergencies, the report said.

Nineteen medical schools participate in the Fund, established "to encourage deserving interns and residents to seek the best possible postgraduate training by providing loan funds that will supplement the stipends available to them at teaching hospitals."

The loans to residents and interns are granted by and repaid to each participating school on terms prescribed by its dean. The Merck Company Foundation has expressed the hope that "the terms established shall not be burdensome to the recipient of a loan." This Foundation, supported by Merck & Co., Inc., makes contributions to education and other worthy causes.

Unique Health Plan Sponsored

The first comprehensive medical care program in the United States under the joint auspices of a medical college-teaching hospital center and a labor-management fund was established in New York City in June, according to NEWS & NOTES of New York Medical College.

A five-year agreement, which will provide home, office and hospital medical care for employees of the hotel industry in New York City and their families, was signed by representatives of New York Medical College-Flower and Fifth Avenue hospitals, the New York Hotel Trades Council (AFL-CIO) and the Hotel Association of New York City in ceremonies in the auditorium of the college, Fifth Avenue at 106th Street.

The program will represent an initial annual outlay of $290,000 by the Union Family Medical Fund of the Hotel Industry of New York City, a joint labor-management body. The agreement is the first step in the establishment of a city-wide program which will eventually cover 80,000 persons—employees of the hotel industry in New York City and their dependents. The New York Medical College-Flower and Fifth Avenue Hospital center will cover 9,000 employees and dependents; the remainder will be covered by additional medical offices to be established throughout New York City.

Government Offers Grants for Community Health Services

Applications from public and nonprofit agencies for project grants authorized by the new Community Health Services and Facilities Act are now being accepted by the Public Health Service.

continued on next page

vascular insufficiency
of the labyrinth is an important
etiologic factor in sudden
perceptive deafness...
"vasodilators [Arlidin] are
of considerable value."

Wilmot, T. J. and Seymour, J. C.:
Lancet 1:1098, 1960.

early cases of sudden
perceptive deafness should be treated
by immediate stellate block
"supplemented by the most effective
vasodilator drug [Arlidin]...
energetic measures to
retain blood supply to the inner
ear are imperative."

Wilmot, T. J.: J. Laryngology &
Otology 73:466, 1959.

in impaired hearing,
tinnitus, vertigo...
when due to ischemia of the inner ear...

arlidin®
brand of nylidrin hydrochloride N.N.D.

Clinical benefit in approximately 50% of cases of recent onset hearing loss treated with adequate vasodilator and other supportive therapy is also reported by Sheehy.

Sheehy, J. L.: Laryngoscope 70:885, 1960.

CAUTION: Like any effective peripheral vasodilator, Arlidin should be used with caution in the presence of recent myocardial lesions, severe angina pectoris and thyrotoxicosis. There are no known contraindications to its use. Complete detailed literature available to physicians.

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The grants are for developing, demonstrating or studying new methods of providing health services, particularly for the chronically ill and aged.

Congress has appropriated approximately 3 million dollars to finance the new grant program this year.

Types of projects eligible for aid include: home nursing services for the chronically ill and aged, improvements in the care given to patients in nursing homes, and programs for making a variety of therapeutic and other services available to patients in their own homes. The project must not only be useful to the community that conducts it, but must also show promise of yielding knowledge that will help other communities to develop similar services.

Although grants can be made to cover the full cost of a project, preference will be given to those that will be partially financed by the applicants and to those that are likely to be continued after federal aid is withdrawn.

Public is Securing Broader Protection

Each year, the American public secures broader health insurance protection for itself against the hospital and medical expenses which result from illness or injury, the Health Insurance Institute said recently.

At the end of 1960, some 92 per cent of the 132 million persons who had hospital expense insurance also had protection against the costs of surgery, the Institute said. Ten years earlier, 71 per cent of those protected against hospital expenses also were insured against surgical costs.

Sixty-six per cent of those with hospital expense insurance at the end of 1960 also had regular medical expense insurance, which helps pay for doctor calls and other non-surgical care by doctors. In 1950, just 28 per cent of those with hospital expense protection had regular medical expense insurance, said the Institute.

Major medical expense insurance, which is designed to help absorb the heavy costs of serious illnesses, also is filling a need of the American people, the Institute said. Of the 132 million persons with hospital expense insurance, 21 per cent had major medical insurance. In 1951, only one tenth of one per cent of persons with hospital insurance had major medical coverage.

Insurance Companies Lead

Over the past decade, insurance companies have become the leading health insurers of the American people, said the Institute. The companies cover more people than any other voluntary insuring organizations in four out of the five categories of health insurance.

Insurance companies protect 55 per cent of the 132 million persons with hospital expense insurance; 57 per cent of the 121 million insured against surgical expense; the 27 million with major medical expense protection; and 75 per cent of the more than 42 million persons protected against loss of income through disability, the Institute said.

National Disability Average 16 Days Per Person Annually

During the year ending June 30, 1960, illness and injury caused the American people to stay home from work, stay in bed, or otherwise cut down their usual activities for an average of sixteen days per person, including six days of bed disability, the Public Health Service reported recently.

These estimates come from the latest in a series of published statistical reports of the Service's National Health Survey. They apply to the civilian population of the country exclusive of persons confined to long-term institutions.

The figures are similar to those reported for the year ending June 30, 1959. However, estimates for both these years are well under the figures for the year ending June 30, 1958, which covered the period of the Asian influenza epidemic. During that year the average was twenty days of restricted activity, including eight days of bed disability.

The new report also shows that during the year ending June 30, 1960, more disability was experienced by women than by men. People over 45 had more disability days than did younger persons, with the rate increasing sharply with advancing age.

People who live in rural farm areas of the country reported more days of disability, on the average, than those living in urban and rural-nonfarm areas. Those in the lowest income groups reported the highest rates of disability, and the number of disability days dropped consistently with rising income.

People who live in the South reported more disability days than persons in other sections of the country. The lowest number of restricted activity and bed disability days was reported by residents of the North Central States.

The data are derived from the National Health Survey's continuing nationwide household interviewing with a representative sample of the population, conducted for the Public Health Service by the U.S. Bureau of the Census. The information recorded about individuals is confidential and only statistical totals are published.

Football Fatalities Call for Equipment Review

The 25 fatalities from playing organized football this fall indicate the need for continuing research to improve the protective equipment for players, say most members of the American Medical Association's Committee on the Medical Aspects of Sports.

While the relatively large number of football fatalities at this stage of the season is shocking to the public and continuing reason for concern to

physicians and other persons, an important question is "to determine whether some or all of them may have been preventable," said Allen J. Ryan, M.D., Meriden, Conn., chairman of the committee. Dr. Ryan, former Yale track man, also is vice president of the American College of Sports Medicine.

There is no real statistical difference between the occurrence of 10, 30 or even 40 fatalities in one season, Dr. Ryan said. There are so few deaths in comparison to youths playing football that statistics are meaningless.

"The number of exposures (times that players participated in a practice or a game) must be in the tens or even hundreds of millions," he said.

Francis D. Murphey, M.D., Memphis, Tenn., said that the helmet research should cover improving protection against injuries of the neck as well as head injuries. Dr. Murphey also said that strict enforcement of the rule against use of face protectors by oponents as a lever might reduce the incidence of neck injuries. Dr. Murphey is a neurosurgeon with a special interest in head injuries.

T. B. Quigley, M.D., Boston, noted that the committee has been deeply involved with equipment, including helmets, and hopes to establish criteria and standards for maximum protection. Dr. Quigley is orthopedic consultant to the Harvard University football team.

Ford Workers Get Full Cost of Health Care

Ford workers and their families will now have the full cost of hospital, surgical and medical insurance (Blue Cross-Blue Shield) paid for them by the company.

High on the list of important economic gains negotiated by the UAW Ford bargaining team was company-paid health insurance.

Ford workers can now begin to take home in their paycheck their share of what used to be a 50-50 splitting of the cost of health insurance.

A completely new schedule of life insurance, sick and accident insurance — effective this month — provides across the board benefits that match anything ever won in union negotiations from a major company.

Ford will also pay half the cost of the monthly premiums for Blue Cross and Blue Shield protection for all Ford workers now retired and for those who retire in the future.

Should the U. S. Congress enact legislation providing hospital and medical assistance to retirees, Ford will nevertheless arrange for supplementary coverage and continue to pay for half the retirees' Blue Cross-Blue Shield monthly premium.

31 Million Covered by Major Medical

Major Medical Expense Insurance, which helps pay for virtually all types of medical services, is the fastest growing form of health insurance in the United States, the Health Insurance Institute reported recently.

Major Medical, sometimes called "catastrophe" insurance, got its start a decade ago and covered some 5.2 million persons by the end of 1955, or one out of every 33 persons among the civilian population.

As of June 30, 1961, however, Major Medical as written by insurance companies covered an estimated 31 million people, or one out of every six persons.

Major Medical, with benefits ranging as high as $20,000, helps pay for hospital and surgical care, and a wide variety of other medical services, including prescribed medicines and drugs, medical appliances and physicians' services, charges by a registered nurse at home or in hospital, ambulance or other necessary transportation, and dressings.

In short, benefits are provided for practically every kind of treatment needed for recovery — either in or out of hospital when authorized by a licensed physician.

Identifying Features

A typical Major Medical policy has two identifying features — the deductible and coinsurance. The deductible, similar to that used in automobile insurance, may range from $25 to $500, depending on the policy, and is the amount of initial medical expenses the insured must pay before his policy benefits begin. The Institute said the higher the deductible was set, the lower the premium would be.

Coinsurance, in which the policyholder shares part of the risk with the company, comes into effect after the deductible has been applied, with the company paying 75 or 80 per cent of the bills, and the insured paying 25 or 20 per cent, according to policy provision, said the Institute.

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HEALTH CARE FOR THE AGED: KERR-MILLS AND HEW*

Extension of Remarks of Hon. Thomas B. Curtis of Missouri, in the House of Representatives, Wednesday, September 27, 1961

MR. SPEAKER, earlier in this session I placed in the CONGRESSIONAL RECORD, under the title "Kerr-Mills Success—Despite HEW"—CONGRESSIONAL RECORD, September 14, pages 18372-18373; corrections to bring material up to date and correct errors in printing, CONGRESSIONAL RECORD, September 19, page 19112—a summary of the State action for the assistance of the aged in the health care field under the Kerr-Mills Act which the Congress enacted in the 86th Congress. I also called attention to the fact that the Department of Health, Education, and Welfare has done little of a constructive nature to lead States to the enactment of the necessary enabling legislation to bring this form of assistance into effect in the States. Despite the attitude of the Department, great advances have been made under this farsighted law.

My placing this material in the CONGRESSIONAL RECORD brought a response from the Department of Health, Education, and Welfare through its Assistant Secretary, the Honorable Wilbur Cohen. I subsequently replied to Assistant Secretary Cohen hoping to clarify the issue on what HEW's role has been in the advancement of the Kerr-Mills Act. Because of the importance of this question of health care for the aged, I would like to place in the RECORD at this point the letter which I received from the Assistant Secretary of Health, Education, and Welfare and my reply to it.

MR. COHEN . . .

". . . this Department has extended great effort to bring the benefits of this legislation to its best development."

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE,
September 22, 1961.

HON. THOMAS B. CURTIS,
House of Representatives,
Washington, D.C.

DEAR MR. CURTIS: I read with great interest your remarks in the CONGRESSIONAL RECORD of September 14, 1961, concerning the administration by the Department of Health, Education, and Welfare of the programs of medical care for the aged under the 1960 amendments to title I of the Social Security Act.

I note in particular your assertion of the total absence of leadership by the Department of Health, Education, and Welfare to encourage their implementation by the States and a failure to mention the provision for increased Federal financial participation in medical care in behalf of recipients of old-age assistance. I feel seriously that you have been misinformed on both of these points. Quite to the contrary, this Department has extended great effort to bring the benefits of this legislation to its best development.

*Reprinted from the CONGRESSIONAL RECORD-APPENDIX, issue of October 13, 1961.

continued on next page

MR. CURTIS . . .

". . . I wish the actions supported this assurance."

HOUSE OF REPRESENTATIVES,
Washington, D.C., October 10, 1961.

HON. WILBUR J. COHEN,
Assistant Secretary, Department of Health, Education, and Welfare, Washington, D.C.

DEAR MR. COHEN: Thank you for your letter of September 22, 1961, commenting upon my remarks accompanying the chart I had prepared to show the magnitude of the Kerr-Mills Act operation, which appeared in the CONGRESSIONAL RECORD of September 14, 1961. I appreciate your assurance that the Department of Health, Education, and Welfare strongly supports the 1960 Kerr-Mills Act to assist in providing adequate health care for our senior citizens. I wish the actions supported this assurance.

Granting the routine actions you say were taken by the Department of Health, Education, and Welfare, they fall short of providing leadership of the Department to encourage the States to implement the 1960 amendment. Furthermore, other actions and statements of Department officials were going in the other direction. It is true that the data for the chart came from departmental reports, yet the Department did not compile and publish this information in usable form. It required considerable effort to gather this material together to make the meaningful chart I put in the RECORD.

continued on next page

Mr. Cohen

First of all, the former administration acted very promptly upon the passage of the Kerr-Mills Act. The law was approved by the President on September 13, 1960, and material was sent to the States by the Department 3 days later. The present administration has continued and accelerated stimulation of State action. This has been done in a number of ways. There are the speeches and articles of Department officials, including myself, urging States to take the necessary action to implement the 1960 legislation. State agency personnel, both administrators and technicians, came to Washington to participate in the development of policies and procedures for the implementation of the program. Consultation was made available to the States by the staff of the Department in Washington and by its regional staff. In 1961 some 12 official documents have been transmitted to the States on the subject of medical care, including medical assistance for the aged and medical care of old-age assistance recipients.

The amendments made to the old-age assistance program in 1960 were simple in nature and did not require the kind of interpretation to the States as did the medical-assistance-to-the-aged legislation. We have, however, made the same effort to help States to expand and improve their medical services.

As you know the 1950 amendments to the Social Security Act permitted payments directly to suppliers of medical care to public assistance recipients, including old-age assistance recipients. When the 1960 amendments increased the Federal share in these payments made to old-age assistance recipients, this type of provision was in operation in 43 States. Following the 1960 amendments five additional States have vendor payments in effect, three more have the necessary authorization. The remaining three—Alaska, Arizona, and Delaware require legislation. Of the 43 States that were making vendor payments before September 1960, 21 have improved their coverage or content from the level of that date. By January 1960, three States will expand coverage to the aged who are not in need of a money payment but are medically indigent. Eighteen States have not expanded their plan provisions from the September 1960 level, and one State requires legislation to take full advantage of the sums available under the Federal law.

Far from overlooking the importance of these developments, weekly reports have been issued on the status of these programs. In fact the information you cited on the advances made was derived from Departmental reports.

The Department strongly supports the 1960 legislation for we believe the States need help in meeting the medical requirements of the needy aged.

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Mr. Curtis

I would appreciate receiving copies of the speeches and articles of Department officials urging States to take the necessary action to implement the 1960 legislation, to which you refer in your letter, or sufficient reference to these speeches and articles so I may obtain them. Perhaps the trouble has been that the press has not given full publicity to these speeches and articles. Would you send me the publicity releases that accompanied these speeches and articles?

On the other hand, I am well aware of the undercover campaign being conducted by proponents of the social security approach to health care for the aged to denigrate the Kerr-Mills Act. We had a full impact of this in the testimony before the Ways and Means Committee in the recent public hearings, beginning with the morning testimony of Secretary Ribicoff himself. I saw no attempts by officials of Health, Education, and Welfare, including yourself, to contradict this effort and to deplore it. Instead, there seemed to be encouragement upon the part of officials in HEW to carry on these attacks.

The attack on the Kerr-Mills Act has been largely directed obliquely by striking at its use of a means test, to make it appear that a means test is degrading and antisocial. I believe the official position of Health, Education, and Welfare is in favor of the use of means tests in many of our welfare and educational programs. Certainly, a publicity campaign which encourages people to look upon means tests as degrading can make them somewhat that way. However, a positive program to point out the proper purpose means tests serve, and why they are not degrading, can move public opinion properly in the other direction.

In light of your letter, I want to protest again what I pointed out to Secretary Ribicoff during the hearings, that HEW has been misrepresenting the budgetary problems of our aged by the use of incomplete and, therefore, misleading statistics. On the expenditure side, HEW points up only the cost of health care in the older person's budget, which is greater than for any other age group, but fails to point out that every other item in the budget for people over 65—food, rent, clothing, recreation, etc.—is less than that of any other age group, and that the total expenditures in the budget for people over 65, including the larger health care cost, is less than that for any other age group. On the income side of the budget, HEW has pointed up individual income instead of head-of-family income and ignored the important items of homeownership, savings, and other possessions which the older people have in more abundance than any other age group. Here the Department has shown unfortunate leadership.

I would also like to point out again the absence

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Mr. Cohen

We further believe that the grant-in-aid approach alone through the old-age assistance and medical assistance for the aged programs, however, cannot be expected to meet the problems of our older citizens who become ill. States have moved as rapidly as possible to use the 1960 legislation and we have helped and urged them to do so. The experience thus far clearly shows that this method or approach alone cannot meet the problem the Nation faces.

Sincerely yours,

WILBUR J. COHEN, *Assistant Secretary.*

Man is the only animal that eats when he is not hungry, drinks when he is not thirsty and makes love at all seasons.

* * *

Who shall decide when doctors disagree?

* * *

The best doctors in the world are Doctor Diet, Doctor Quiet, and Doctor Merryman.

* * *

When one's all right, he's prone to spite
The doctor's peaceful mission;
But when he's sick, it's loud and quick
He bawls for a physician.

* * *

What is food to one man may be fierce poison to others.

* * *

I prefer to err with Plato.

* * *

By medicine life may be prolong'd, yet death will seize the doctor too.

* * *

Medicine, the only profession that labours incessantly to destroy the reason for its own existence.

* * *

There are some remedies worse than the disease.

* * *

I firmly believe that if the whole materia medica as now used could be sunk to the bottom of the sea, it would be all the better for mankind — and all the worse for the fishes.

* * *

A well-trained sensible family doctor is one of the most valuable assets in a community, worth today, as in Homer's time, many another.... Few men live lives of more devoted self-sacrifice.

* * *

A Merry heart doeth good like a Medicine.

* * *

Deceive not thy physician, confessor nor lawyer.

... From FAMILIAR QUOTATIONS by John Bartlett. 13th Ed. Little, Brown and Company. Boston, Toronto, 1955.

Mr. Curtis

of leadership on the part of HEW in compiling and disseminating to the public accurate and up-to-date information about what is being done in the private sector in increased health insurance, added facilities, and skills for caring for the aged. The tremendous advancements that have been made in recent years in these fields was attested to by many careful studies presented to the Ways and Means Committee during the public hearings. This data should have been known, compiled, and disseminated by HEW. Certainly, after the hearings were completed, HEW should have helped in directing the public's attention to this data.

HEW still has not gathered pertinent information of what is being done at the county and local governmental level in the health care field and persists in issuing misleading information about what States are doing, minus this data. Many States operate their health programs primarily at the county and local level, rather than at the State level. HEW, in issuing its statistics, fails to note this important fact.

My statements in the CONGRESSIONAL RECORD of September 14, 1961, are mild when I think of the complete story of the negative leadership HEW has been giving to the country in this important issue of health care for our society.

I would be happy to have your further comments on this matter in rebuttal. I have no desire to be unfair, but I am determined to do the best I can to give the public as full and as balanced a picture of our health care programs as possible.

Sincerely,

THOMAS B. CURTIS

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BOOK REVIEWS

GOOD-BYE DOCTOR ROCH by André Soubiran. Doubleday & Company, Inc., Garden City, N.Y., 1961. $4.50

Doctor Georges Roch comes to Melum Psychiatric Hospital as the new medical director. Melum is in poor condition, even though the time is the present. Roch has a job trying to convince the board to change the rules, atmosphere and to offer better medical help. A patient, Jean Lascombe, shows such improvement that Doctor Roch puts him to work in the hospital library; he then goes on to become Doctor Roch's secretary.

Lascombe keeps a diary that is the major part of the book. Lascombe's wife, Colette, joins the "Friends of Melum Hospital" and comes to help and work for the hospital. With the doctor's and his wife's help, Jean returns to normal.

This book would appeal to anyone interested in the psychiatric patient. I have enjoyed the author's style of writing and felt he presented a clear picture of the problems confronting Doctor Roch.

DEBORAH ALDEN CLARKE

CARDIOVASCULAR DYNAMICS by Robert F. Rushmer, M.D. Second Edition. W. B. Saunders Company, Philadelphia, 1961. $12.50

This volume, like the first edition, can only be described as excellent! Doctor Rushmer has made full use of the old adage, "One picture equals a thousand words." By employing numerous schematic diagrams, he makes sometimes complicated physiologic and anatomic phenomena easily understood and, possibly, more easily retained.

This book is beautifully sectioned for continuity of context. All chapters were thoroughly enjoyed so that attempting to single out one or two of the more outstanding portions is difficult. The chapter titled, *Embryologic Development and Congenital Malformations of the Heart*, however, was probably my favorite. Here, Doctor Rushmer employs the same technique used in his classic movies of the same subject and makes a complicated discussion "simple."

CARDIOVASCULAR DYNAMICS will undoubtedly prove itself of great help to the student, house officer, general practitioner, and cardiologist. Although admittedly no attempt is made to cover the entire field of cardiovascular disease, this book will be useful as a ready reference for most aspects of this complex subject and as a steppingstone to more complete dissertations of any of the numerous phases covered.

Suffice it to end with the note that I recommend this text highly!

FRANK MERLINO, M.D.

THE MEANING OF DEATH. Edited by Herman Feifel, PH.D. Blakiston Division, McGraw-Hill Book Co., Inc., N.Y., 1959. $6.50

A substitute title might be *A Source Book on Death.* Eighteen essays on eighteen aspects of death and dying are grouped under the following sections: *I. Theoretical Outlooks, II. Developmental Orientation, III. Death Concept in Cultural and Religious Fields, IV. Clinical and Experimental Studies,* and *V. Discussion.*

The objective of the book is good. The attempt has been made, and successfully, to approach a subject about which everyone has ideas in an organized and systematic way. It is natural that the book is edited by a physician; it is natural that it should be of interest to physicians. Since all knowledge is of maximal value only when formulated and organized, this is a worthy beginning for studying a subject with which we have a great acquaintance but which is very poorly understood and seldom studied by the profession.

ROBERT V. LEWIS, M.D.

PREVENTIVE MEDICINE IN WORLD WAR II, VOLUME V, Communicable Diseases Transmitted Through Contact or by Unknown Means Prepared and Published under the direction of Lieutenant General Leonard D. Keaton, The Surgeon General, United States Army. Medical Department, United States Army, Wash. 1960. For sale by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C., $5.75

This is the fifth in the clinical series, PREVENTIVE MEDICINE IN WORLD WAR II, and like its predecessors is a detailed account of the activities

continued on next page

surrounding this group of diseases in the various theaters of World War II. The list of contributors and authors of the various chapters is an imposing one. Names long prominent in the field of epidemiology and preventive medicine are associated with this historical record of wartime communicable disease experiences.

Nearly half of the book (192 pages) is taken up with the venereal diseases. One would expect this of a group of diseases which early in the war was the greatest cause of non-effectiveness in the Army and never ceased to be a problem. The chapters on venereal diseases suffer from too much detail and repetition of the problems described in the various theatres. The policies toward venereal diseases and control measures varied in the different theaters, apparently depending upon the theater or unit commander. With the knowledge of venereal disease control available before the onset of hostilities, it is surprising that houses of prostitution and periodic and slip-shod examination of prostitutes were tolerated. This section of the book gives a fairly good insight into prostitution as it occurred during the war in various parts of the world. The appendix D has an excellent summary of venereal disease statistics during the war, with a total of 18 tables. The photographs, of which there are many in the venereal disease section, are technically excellent and interesting. The control of these diseases was more of a command problem than a medical one.

Many of the other diseases mentioned are little known and of not too great interest to the civilian reader in the temperate climate. Having little mortality, they exerted little influence on the Army Medical Department yet caused a certain amount of non-effectiveness. But some of the old familiar diseases were present and described in chapters on scabies, impetigo, poliomyelitis, mononucleosis, and hepatitis. There is a good description of the serum hepatitis epidemic that occurred after the use of yellow fever vaccine in 1943. This was the most extensive outbreak of serum hepatitis in U. S. military history. Nearly 50,000 cases occurred, due to this vaccine.

A large epidemic of infectious hepatitis occurred in the Mediterranean and Middle East theaters. When we note that the average hospital stay from hepatitis was 25-50 days, and that 20,000 cases were treated, we can see that the loss of time from this disease was terrific; particularly in view of the fact that at the beginning of the war it was not felt to be a serious problem. The entire epidemiological story of hepatitis during the war is well documented.

The objective of the book, to present a record of wartime experiences and to present historically the importance of communicable diseases as a hazard to the Army, has been achieved. There is much of value for civilian preventive medicine in this historical record. The medical man with a penchant for history will enjoy this book. For the student of venereal disease control, the revival of past errors from one war to the next will be interesting. The presentation takes account of advances in knowledge up to the time of writing of the book.

RAYMOND F. MCATEER, M.D.

DISEASES OF THE NEWBORN by Alexander J. Schaffer, M.D. With a Section on Neonatal Cardiology by Milton Markowitz, M.D. W. B. Saunders Co., Phil., 1960. $20.00

This is a truly indispensable book for every pediatrician and a thorough, compact monograph on the crucial neonatal period. The book groups disorders according to symptoms. There is an introductory chapter on the normal newborn and variations in length of gestation. The disorders are represented in X-ray films whenever possible. Especially useful are the X-ray pictures presenting disorders of the lungs and of the skeletal system. The incidence, etiology, pathology, clinical features (symptoms and signs), diagnosis, and treatment are discussed and illustrative cases presented.

A valuable aid is the enumeration of minor and sometimes easily missed signs. Most of the treatment recommended in the book is based on the author's first hand experience. This book is the first of its kind. It separates the newborn from the realm of general pediatrics and discusses it as a separate problem, constructing a specialty within the broad specialty of pediatrics.

SOPHIE M. WLASSICH, M.D.

ATLAS OF OBSTETRIC TECHNIC by J. Robert Willson, M.D., M.S. Illustrated by Daisy Stilwell. Deluxe edition. The C. V. Mosby Co., St. L., 1961. $14.50

There are several good texts on obstetrics but there has been no complete atlas of obstetrics technic which the medical student or physician could consult. Doctor Willson, who is professor of obstetrics and gynecology at Temple University School of Medicine, has successfully filled this void in obstetric teaching with this atlas.

The book contains a minimum of text. The first two chapters are devoted to the professional staff and labor and delivery room facilities plus a brief discourse on pain relief during labor and obstetric anesthesia. The rest of the fourteen chapters contain more than 300 concise and clear illustrations of the various obstetric operations with which a complete obstetrician must be familiar. Each chapter is introduced by a brief discussion of the indication, complication, and details of manage-

ment of the obstetric operation to be described. The remainder of each chapter is devoted to illustrations of the various steps in the operation described. The right-hand half of each page presents the drawings and the left-hand leaf a short description of each illustration.

The obstetric residents have received this atlas enthusiastically. Doctor Willson and Miss Daisy Stillwell who made the illustrations have made a real contribution to obstetric teaching.

William J. MacDonald, M.D.

APPRAISAL OF CURRENT CONCEPTS IN ANESTHESIOLOGY. Edited by John Adriani, M.D. The C. V. Mosby Company, St. Louis, 1961. $7.75

In brief and skillful form, the authors present a collection of reviews of contemporary concepts in the field of anesthesia. They deserve credit for compiling and condensing this large volume of clinical and experimental data into concise and highly informative chapters. These reports are not intended to be exhaustive reviews. They have been "prepared for clinicians, written in clinicians' language, and are intended primarily for clinicians," and in this respect, this book fulfills its objectives. To some clinicians, however, it will prove to be too abbreviated and in many instances overpositive.

The material is well chosen. Of especial practical importance are the chapters on extracorporeal circulation, pulmonary edema during anesthesia, and adhesive arachnoiditis. Each discussion is compressed into a few small pages, with the result that only the most highly pertinent and relevant factors are included. A glance at the bibliography that follows each chapter reveals that some of the more up-to-date publications have been omitted. For this reason the reader may well question the true value of some of the conclusions. In the chapter on infant resuscitation, for example, although mention is made that the initial expansion of the alveoli may require inflating pressures of up to 40 mm hg., the importance of a very short application (½ second) of this high inflating pressure is not emphasized. Nevertheless, it contains a wealth of information and is recommended as a ready and handy reference.

Herbert Ebner, M.D. and
José D. Soriano, M.D.

DIFFERENTIATION BETWEEN NORMAL AND ABNORMAL IN ELECTROCARDIOGRAPHY by Ernst Simonson, M.D. The C. V. Mosby Co., St. L., 1961. $13.50

This compact book of 328 pages is firmly bound, with a good quality paper and clear, readable type. The illustrations are, for the most part, of good quality and the tables and diagrams clearly presented and easy to follow.

This study is based on work performed over the last sixteen years and is a very considerable effort, on the basis of statistical analysis, to separate the normal from the abnormal in the electrocardiogram and to indicate the areas in which clear differentiation cannot be made. It gives considerable attention to the borderline tracing and endeavors to inquire into the types and sources of normal variability. Some of the chapter headings, which give some indication of the content, are as follows: Critical Review of Present Electrocardiographic Standards, Sources of Variability — Technical Variability, Sources of Biological Variability — Functional and Physiologic Variables, Sources of Biological Variability — Constitutional Variables, Normal Limits, Electrocardiographic Stress Tolerance Tests, and Minor Electrocardiographic Changes.

One of the best features of the book is an extensive bibliography, to which frequent reference is made in the text. There are many clinical suggestions of value, such as the presentation of evidence that the disappearance of the Q wave in lead III with deep inspiration by no means indicates that this is a normal finding. Instances are presented where this disappearance has occurred in the presence of proven posterior infarction. There are many tables of ECG measurements related to age and sex and much of the material is analyzed statistically.

In general it would appear that this well-documented work should be of real interest and value to the careful student of electrocardiography and stimulate fresh thought and analysis of several time-encrusted beliefs. For one with only casual interest in the electrocardiogram, it would provide heavy going.

F. B. Cutts, M.D.

THE HAND. A Manual and Atlas for the General Surgeon by Henry C. Marble, M.D. W. B. Saunders Co., Phil., 1960; reprinted 1961. $7.00

This is a compact volume containing a wealth of useful information for the general surgeon. It is not an exhaustive study of hand surgery, but it contains 199 pages of fundamental material for the surgeon who does sporadic work on the most useful member of the body. Initially, it deals with the anatomy and physiology of the hand, and this review is made easier with numerous anatomical views. Personal cases and experiences are cited in place of a bibliography.

Almost half of the book is taken up by the management of fractures and open injuries. This includes reduction of fractures, splinting, tendon

concluded on next page

repairs, skin grafting, and even nerve blocks. No book of this nature is complete without a section on infections. Most of these have their beginning in the most trivial of wounds, where a little knowledge of the injury and the type of infection can shorten the disease and the disability of the patient, and save a finger here and there.

Tumors received little more than mention. The author felt that these were not serious problems in that tumors on the whole were benign, he having seen only three or four malignant tumors in his practice.

CARL V. ANDERSON, M.D.

LIGHT COAGULATION. By Gerd Meyer-Schwickerath, M.D. Translated by Stephen M. Drance, M.D. The C. V. Mosby Co., St. L., 1960. $9.50

It has been known since ancient times that the sun has the power to destroy sight, and burns of the macula are still seen after every solar eclipse. This monograph by the professor of ophthalmology at the University of Bonn, deals with the therapeutic use of radiant energy in closing retinal and macular holes or tears, the treatment of several types of vascular disease, and the destruction of neoplasms of the retina, choroid and iris.

Radiant energy must be absorbed to produce an effect and this allows its harmless passage through the refractive media of the eye. Experimental data leading to the selection of the high pressure Xenon lamp as the energy source is presented, and the instrument constructed by Zeiss is described.

Retina which is elevated cannot be coagulated because it absorbs very little light. For this and other reasons the method can be used in prophylaxis, but not in treatment of frank retinal detachment. Several rare vascular diseases of the retina have been successfully treated.

The evidence for treatment of intraocular tumors leaves much to be desired, but the results suggest its trial when the fellow eye is blind.

H. FREDERICK STEPHENS, M.D.



MEMORIES FROM THE PIONEERING DAYS

"Harefuah"* is now publishing a series of articles in which veteran Israeli doctors describe some of their experiences during the pioneering days of Jewish settlement in this country.

Here is an extract from the reminiscences of the late Dr. Zalman Avigdori:

Forty years ago, when I was working as the physician at the hospital in Tiberias, I was called urgently to attend a woman who had given birth three hours previously; the placenta had not come down and she was bleeding profusely. I was the only doctor in the hospital and some of my patients were dangerously ill; I was afraid of leaving them but I was even more afraid that I would harm rather than help the unfortunate mother, since I had little experience in obstetrics. I then remembered that Dr. Joseph Asherman, (now Professor Asherman of Tel-Aviv) who had been sent by the Hadassah organization to look after the workers engaged on building the Tiberias-Zemach road, had told me that he had worked as a gynecologist and obstetrician in Prague. Dr. Asherman was now in charge of the small hospital which had been established for the road-workers at nearby Hame Tiberia. I immediately sent him a message asking him to attend to the case. Two hours later, Dr. Asherman came to see me at the hospital and told me how he went to the patient's house, asked her husband a few questions and immediately went into the kitchen to scrub his hands. However as he approached the patient's bed, the local midwife jumped up and forcibly tried to prevent him from treating her. The midwife thought that this young fellow (Dr. Asherman was then some thirty years of age), who was wearing an open-necked shirt and shorts, would do the patient grievous harm. Dr. Asherman pushed her away with a none too gentle movement of his foot, since he did not want to dirty his hands. The mid-wife, dumbfounded by the strength of this "goy" (gentile), fled from the scene, and Dr. Asherman extracted the placenta, gave the patient an injection and left her after her condition had improved.

Some days later, I was invited to the home of Mr. B. Ben-Tovim, the manager of the branch of the Anglo-Palestine Bank in Tiberias. Among the guests was the midwife who related her version of the incident. Next day, Dr. Torrance (the Doctor of the Missionary Hospital in Tiberias) returned to Tiberias and he was called in to see the patient; he found that she was in good condition and that Dr. Asherman had given her the correct treatment. The midwife who was also present could hardly believe it and she asked (in Yiddish) "Is a doctor who works on the road also a doctor?"

... Excerpt from Quarterly Review of the M. H. H. (Non-Resident Fellowship of the Israel Medical Association), Vol. 1, No. 1, Jan.-March, 1961, Jerusalem.

*Former designation of the M. H. H.

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